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ABSTRACT

Designed to integrate aesthetic education into the mainstream of an elementary school program,, the curriculum development process and sample units of the Aesthetic Education Program are described in volume one of this final report. The introduction describes the program, the curriculum development process, the curriculum, and the overall goals of the project. The remaining portion of this volume provides sample units of the various instructional materials for the elementary school. The program is organized around six major areas: aesthetics in the physical world, aesthetics and arts elements, aesthetics and the creative process, aesthetics and the artist, aesthetics and culture, and aesthetics and the environment. Each of these areas contains sample lessons with references to user characteristics, grade level, patterns of use, assessment provision, time requirement, implementation procedures, and evaluation studies on the effectiveness of the lesson. Sample lessons for teacher training in the program are also included. (DE)

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A Report on
The Aesthetic Education Program

Volume I

prepared for
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October, 1975

submitted to
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Introduction

The Aesthetic Education Program of CEMREL, Inc.: A Brief History

It was evident in 1967 when the Aesthetic Education Program was being conceived that the priorities in our educational system placed a low value on aesthetic education as an integral part of general education. There was a group of subjects being taught, such as art, music, theatre arts, and dance, whose content could be characterized as aesthetic. Generally, these were not considered "required" subjects, and they existed for the most part on the periphery of the general education program. A number of arts educators, however, were committed to developing an aesthetic education program and to incorporating subject matter with aesthetic content into the mainstream of a total school program which was supposed to provide a general education for all students.

The commitment to the idea of an aesthetic education for all students grew out of a series of meetings, developmental conferences, and seminars related to research and development in the arts and humanities which were sponsored by the Arts and Humanities Program of the U.S. Office of Education in the 1960's.

The conference that had the most effect on the development of the Aesthetic Education Program was "The Seminar in Art Education for Research and Curriculum Development" held at Pennsylvania State University in 1965 under the direction of Edward Mattil,[1] then head of the Art Education Department of Pennsylvania State University. The purpose of the conference was to develop a cluster of research ideas that could be used as a basis for a proposal to be submitted to the Office of Education or to other agencies for support. One of the recommendations was that an institute devoted to the systematic study of aesthetic education be established.

This research and development center was to be designed to encourage research in the arts and in aesthetic education by supporting investigators to carry out research determined either by the institute itself or by the researcher.

The research and development center proposal was not supported by the Office of Education, but the project director, Manuel Barkan, and his colleagues were asked to submit a proposal which could concern itself with the development of curriculum in aesthetic education directed at general education in the elementary and secondary schools rather than at basic research.

The Arts and Humanities Program sponsored another conference to consider the next step for aesthetic education at the Whitney Museum of American Art. This included a mix of scholars, educators, philosophers, and researchers in various fields as well as representatives from the National Office of Education, the National Endowment for the Arts, and various universities. The purpose of this conference was to raise questions about, and seek answers to the possibility of establishing a curricular program for aesthetic education.

The Whitney Museum Conference was significant for aesthetic education because of two major outcomes. First, the participants pledged their time and effort to serve as a reference group. This was probably the first multi-disciplinary group to express a commitment to further research and development in aesthetic education. Second, the decision to seek planning funds from an educational laboratory set the stage for the eventual housing of the Program in the Central Midwestern Regional Education Laboratory, now CEMREL, Inc.[2]

In July 1967, CEMREL sponsored a second aesthetic education conference at the Rhode Island School of Design. By this time a planning document which outlined the program for curriculum development in aesthetic education had been developed by Laura Chapman and Manuel Barkan. The purpose of the conference was to review this plan and to make suggestions for its revision.

The participants endorsed the proposal's concept of an aesthetic education program that emphasized curriculum development within the context of general education. The planning report also proposed a design for curriculum development in aesthetic education and suggested an initial plan for organizing major tasks and functions for such a program. It divided the work into two phases.

Phase I, under the direction of Manuel Barkan, was the development of the theoretical base and rationale, and the major result was the publication of Guidelines: Curriculum Development for Aesthetic Education[3] by Barkan, Chapman, and Kern. This phase was supported by funds from The Ohio State University, the Arts and Humanities Program of the Office of Education, and CEMREL, Inc.

In 1969 a joint report was presented by Manuel Barkan and Stanley Madeja to the conference in New York City. That report outlined the plans for the actual development of Phase II of the Aesthetic Education Program. The major thrust of this phase was to be the design and development of curricular resource materials which embodied the concepts outlined in the Guidelines. Stanley Madeja was selected to head that phase of the project which is now the CEMREL Aesthetic Education Program.

In designing the Program, it was recognized that getting aesthetic education accepted into the general education program would be a difficult task. A number of things would have to be done to provide the general educational audience with an understanding of the importance of aesthetic education to general education.

The lack of public understanding of what the arts were all about and about the necessity for aesthetic content in the public schools resulted in a lack of support for these concerns from school boards, administrators, teachers, and parents. Art educators were not able to articulate the rationale for these content areas in a way which justified their existence within the general education program. If aesthetic education was to be incorporated into the general program, justifications for its inclusion would have to be articulated.

In addition, the arts disciplines (music, theater, visual arts, dance, and film) lacked generalizability to other areas of the curriculum in the schools. Arts educators agreed that there were many connectors or links to social studies, mathematics, science, or physical education that could be designed and applied to the aesthetics of these areas. However, most arts programs, when examined, were found to be very insular and self-protecting. In most cases there was no effort to relate the arts among themselves as disciplines, let alone relate them to other areas of study. They tended to be "apart" from the general education program. This separateness would have to be remedied if a high priority was to be given to aesthetic education.

A majority of the arts programs existing in the schools in the early 1960's were related to outcomes that apply to the training of the professional artists, not to the student who is trying to obtain a general education in the arts. A program designed for training artists in any one of the arts is much different from a general education program in the arts. Nevertheless, goals which are more applicable to professional schools of music, art, and theatre were applied to arts programs at the high school and elementary school level. The goals for a comprehensive program which includes all the arts and relates and defines aesthetic content in other disciplines are much broader and are generalizable to every student. It was these goals which would have to be stressed in order to get an aesthetic education program accepted.

Another critical need was to develop a resource of instructional materials which could be used by arts teachers and/or classroom teachers. It was a sad commentary on the arts that there were few if any materials available which could be introduced into the classroom without major adaptations by the teacher. This was not the case in science, mathematics, language arts, or social studies. The need for materials to advance curriculum efforts in general arts programs was critical if the concept of an aesthetic education program for all students was to be realized.

The CEMREL Aesthetic Education Program has addressed itself to these problems and has provided teacher education and curriculum materials, and curriculum designs, which together constitute a resource to help schools develop a generalized course of study for all students using all the arts.

Aesthetic Education: A Conception for Curriculum Development

When a fundamental change is proposed in the educational program, in this case the introduction of aesthetic education as a major concern of general education, it is necessary to begin at the beginning with a conception of aesthetic education and some discussion of its content.

The development of the precise conception of aesthetic education was elusive. Aesthetic concepts by their very nature are not defined in very precise terms and they generally allow for contradictory points of view. Morris Weitz comments on this:

> Aesthetic education, as a concept, differs from aesthetic and education or, for that matter, from theater or drama, in one important respect: it has no history. Instead it was introduced, not too long ago, as a term to fill a certain need, to cover and correct a certain deficiency which its inventors felt was threatening the whole of the early educational development of the child. And what was (and is) this need? The lack of recognition of the importance of the arts and all of their potential in the normal education of the child. The term was coined with the deep conviction that this gap must be bridged, the need fulfilled; the commitment to the importance of art and the aesthetic as an integral rather than marginal constituent of early education which was to be heard and shared by all.
>
> Thus, I suggest, the way to understand what aesthetic education is, is not to define it but to state its great goal: the enhancement of the full growth of the child in which the aesthetic--as open as that term is--would achieve at least an equal status with the intellectual.[4]

Weitz' definition of aesthetic education deals with the concept as a functional or exemplary process. However, in a curriculum development effort as large as was the CEMREL Aesthetic Education Program, this position did not suffice. Therefore, an attempt was made to find some consensus among theorists as to the nature of the aesthetic experience and how it would apply to learning. The consensus was that the aesthetic experience is one that is valued intrinsically and which can be valued for itself. Involvement in an aesthetic experience, whether it is in terms of listening, looking, performing, or producing, carries with it the desire to sustain and feel the full import of that moment for its own sake. It is that ability to perceive the integral relationship between the form and content of the experience which categorizes the aesthetic. The way in which the individual perceives the object or the experience becomes an essential characteristic of the aesthetic point of view and distinguishes these experiences from other methods of perception and from other values. Aesthetic experiences are varied in their intensity, and this variety is related to the quality of the object or event which provides them. The phase "aesthetic education" from this perspective means that we are dealing with teaching for the aesthetic and that we have combined the two words, "aesthetic" and "education," to allow for consideration of the nature of aesthetic experience and aesthetic value in instructional programs.

To clarify further the concept of aesthetic education, it is also helpful to distinguish between aesthetic education and the study of aesthetics as a branch of philosophy, which has traditionally been an area of concentration in the universities. Aesthetics--the philosophy of aesthetic phenomena--draws its content from the philosophical literature. The instructional approach at the university level has placed aesthetics, no matter how unintentionally, almost exclusively into an academic category that does not directly relate to the "enhancement of the full growth of the child."

Aesthetic education should not be considered as a discipline in itself as is art or music. Instead it can be considered in a broader context as an area of study which encompasses all the arts. As such, aesthetic education encompasses the full scope of aesthetic phenomena. These phenomena include the aesthetic experience itself, the process by which we produce an aesthetic product, the object or event and the historical and cultural tradition within which it is produced. As an area of study, aesthetic education deals with content more thematically, with broader concepts and topics, and it uses the various arts disciplines as examples rather than approaching them chronologically or historically.

In summary, precise definitions are not characteristic of aesthetic concerns, but there are some constants which can help to define aesthetic education for general instruction.

1. Aesthetic education is concerned with the introduction of aesthetic values into instruction and the development of aesthetic perception or aesthetic ways of perceiving and knowing.

2. The aesthetic experience is valued intrinsically (valued for itself) and the ability to perceive the form and content of the experience becomes characteristic of aesthetic perceptions.

3. The arts are carriers of aesthetic content and are the most appropriate exemplars to study and experience.

4. Aesthetic qualities exist in all phenomena and aesthetic education will help the student identify, describe, analyze, and value these qualities through the development of a total critical language which uses not only verbalization but all the sense modalities for expression and communication.

The Aesthetic Education Curriculum

CEMREL's Aesthetic Education Program saw itself in the role of a provider of resources at a national level rather than in a prescriptive role. As a consequence the Aesthetic Education Program made decisions not only in light of the arguments posed by theorists but also in light of the social and educational responsibilities dictated by its constituency and by its goals. The method of curriculum development and the model for the development of resources employed by CEMREL were based both on theory and on practical needs. Curriculum development was accomplished through the efforts of a consortium of talent drawn from many academic areas.

The Aesthetic Education Program is based on a model which has been used by other curriculum development projects within the laboratory's programs and which is adapted from them. In the original design of the model for the development of an aesthetic education curriculum, a logical entry point was a review of curriculum theory to see if there was any agreement about where to start the process. Although there was no consensus on where to begin curriculum development, there was agreement on the referents for building a curriculum. Simply stated, these referents are the individual or the learners, the society, and the discipline. Curriculum theorists do not, however, agree upon the relative importance of each referent to the curriculum. This disagreement was outlined in an early position paper by Madeja and Kelly.[5] For instance, Ralph Tyler writes that the objectives for any curriculum should be derived equally from studies of the learner, studies of contemporary society, and from the subject specialists.[6] Arthur King and John Brownell state that the first priority should be given to subject matter specialists, to the discipline.[7] Society and the learner, they protest, tell only what a man is and not what he might be. The disciplines are not just accumulations of information but rather ways of knowing and are, therefore, progressive in nature. Equally logical arguments have been made by Franklin Bobbitt[8] for the society and Harold Rugg[9] for the learner as the prime factor in curriculum development.

Although each position was supported by very powerful arguments, the emphasis on one referent did not exclude consideration of the others. The only obvious conclusion the Program could draw from the various arguments of the curriculum theorists was that curriculum development should begin with decisions about the three referents: the student, the discipline, and the society. Arguments about which comes first fall into the chicken and the egg category.

Consequently, the starting point for curriculum development by the Aesthetic Education Program was in part determined by the responsibility of the laboratory to the school systems throughout the United States. Because the United States is a diversified nation, schools are very different from one another in their political, educational, and social make-up. As a consequence, it would be difficult to build a national curriculum that was founded on the social or learner referent. A discipline, however, is relatively unaffected by ethnic background, geographical location, and community values. It seemed that the principal referent or starting point for a program with national commitments should be the discipline. For aesthetic education this means the arts. With the discipline as a starting point, the society and the learner become the constraints that dictate the alternatives.

It should be made clear that even though the discipline is chosen as the starting point for curriculum development it does not follow that the curriculum becomes highly cognitive. On the contrary, the very nature of disciplines in the arts and aesthetics precludes this from happening. The statement of the general goal of the Aesthetic Education Program emphasizes this fact:

> Aesthetic experience is an experience which is valued intrinsically and aesthetic education should provide opportunities for aesthetic experience, and opportunities to build the skills and knowledge necessary for significant aesthetic encounters. It follows, therefore, that the general goal for aesthetic education is to increase the student's capacities to experience aesthetic qualities (values) in man-made and natural objects and events in this environment.[10]

When the content in the disciplines becomes the principal referent of the curriculum, the task of the developer is to adapt the content to the learner. The learner defines the level and strategy for instruction, and the society (in most cases, the community) provides the value structure in which the curriculum operates. A great diversity of opinions and values exists among school systems, and within an aesthetic education program development of curriculum designs to fit every school setting is impossible. However, a national laboratory can define the content and develop materials which suggest grade levels and strategies for instruction, even though it cannot anticipate the value decisions of each community nor determine what will be taught in their schools. It is at this level that the curriculum model operates.

Sources of Content for Aesthetic Education

The attempt to establish aesthetic content as an integral part of all education has brought about the necessity of defining the source or sources of content for aesthetic education from which programs can be designed. The philosophy of aesthetics is the ultimate source of concepts and content for general education programs in aesthetic education. Aesthetics can act as an umbrella under which concepts and ideas are developed. However, to use this as the sole basis for the content of the arts program would be difficult, if not impossible, especially when the developer is faced with applying philosophical aesthetics to learning materials for very young children.

The content base provided by the arts disciplines themselves is a viable and necessary addition to that drawn from philosophy. Study of dance, film, literature, music, theatre, and the visual arts and the methods by which they are organized, the aesthetic experiences they provide, and the distinctive processes involved in the creation and analysis of works of art are all important content areas for aesthetic education. The whole art work is a major content source for the aesthetic education curriculum, for it is the most direct example of aesthetic phenomena. The context in which the work exists and is valued will provide the philosophical dimension of the content base. The work of art serves as an exemplar of aesthetic phenomena. Barkan, Chapman, and Kern outline this point of view in Guidelines: Curriculum Development for Aesthetic Education, where they analyze the structure of the arts disciplines as a source of content for aesthetic education.[11] This idea has been expanded further in the work of Ecker,[12] who used the behavior of artists in each of the art forms as behavior models for aesthetic education such as the architect, the designer, the choreographer, and the critic.

Assuming that the arts disciplines are the sources for content in education, the next step must be to find the way in which these exemplars can be chosen and organized to provide the most meaningful instructional program. There are and have been many attempts to show how the arts are interrelated, and recent writings focus on how these interrelationships can be generalized to demonstrate similarities and differences across the arts. There is little disagreement that this is a workable context for organizing some content areas in the arts. But it cannot be considered sufficient for the complete arts program.

Interrelationships and commonalities in the arts do exist, but at a conceptual level. When the concepts are similar across the arts, they can be explored through each art form. This is significant and useful in an interdisciplinary approach to the arts. However, even if the commonality approach is applicable in certain instances when related to elements of the art forms, it loses substance when the obvious examples are exhausted. Light, sound, time, motion, and space are related to most art forms, but it is evident that more specific elements, such as texture, or color, even if labeled the same in two different art forms, are not identical. Texture in music, related specifically to tone color, is quite different from texture in the visual arts, which is related to surface and kinesthetic qualities.

So it seems that designing an aesthetic education program based solely on the interrelationships in the arts would have been conceptually dangerous. The disciplines exist as singular modes because of distinctly different content. They do relate to one another in certain instances in spite of the unique natures and characteristics of each, but a forced synthesis of the arts into an area of study called aesthetic education is artificial and implies that all things in the arts are interrelated. This is clearly erroneous.

Should, then, the decision be to pursue each of the arts singly as the sole content base for arts programs? This seems equally difficult to justify conceptually in the light of the actual interrelationships which are conceptually sound.

The solution to the problem of interrelationships and singularities of the arts for the Aesthetic Education Program was to combine two approaches: regard the arts disciplines as phenomena existing separately but sometimes best explained in terms of their unique qualities and other times by their interrelationships, and assume that there are concepts found in philosophical aesthetics which can be used as organizers for the general content base for an aesthetic education program. The interrelatedness of the arts or even the juxtaposition of unlike disciplines can be presented on the basis of such existing art forms as the happening, the film, the theatre performance or the environmental sculpture, all of which deal with a natural synthesis of characteristics of two or more of the disciplines.[13]

Designing the Curriculum in Aesthetic Education

The design of the curriculum for an aesthetic education program could have been varied according to the particular setting but, however it was designed, the following questions had to be answered: Where would aesthetic education be taught within the general education program? What were the long range goals? How would it be organized?

Placement of Aesthetic Education Within the Elementary Curriculum

One pressing practical consideration was to determine where the content for aesthetic education would be taught. How would it fit into the context of the school day or year? The dilemma of finding time for teaching what is considered a new or low priority subject area had to be resolved before effective curriculum planning could begin to take place. An analysis of the existing curriculum had to be made and an entry point for aesthetic education determined very early in the planning process. The following are possible entry points; there are certainly others which would be applicable to a particular situation.

The most direct way of inserting aesthetic content into the curriculum is to treat it as an area of study. The area of study concept for aesthetic education means that an allotted time slot is given over to aesthetic education on a daily schedule. All the arts--music, art, dance, drama, film, and literature--are brought together to provide an arts component for the general education curriculum. A similar organization pattern is currently used for teaching social studies, the sciences, or language arts. In the simplest terms, the area of study concept means that approximately one-sixth of a regular teaching day would be devoted to aesthetic education.

A second method of inserting the content into the curriculum again uses aesthetic education as an area of study, but in this instance the aesthetic content is also defined within other areas of study. In each designated area of study, units are added which can be described as the aesthetics of language, the aesthetics of science, and/or the aesthetics of mathematics.

The third method is to design a separate course for each arts discipline plus discrete units within the other disciplines to make up the total program. This program differs from the first option in that the aesthetic content resides in each art discipline that is taught throughout the school week. Each art course is designed to reach a broad range of students, not just the talented few. Separate courses in art, dance, music, theater, literature, and filmmaking are offered as part of a total general education program. Occasionally, interdisciplinary units labeled "aesthetic education" would be organized around concepts which are common to more than one art form. This method has the disadvantage of consuming more of the school day and does not fit as well within the organization of most elementary curricula.

A fourth option of aesthetic education treats the content as a part of other disciplines: the aesthetics of language, the aesthetics of science, the aesthetics of the arts, the aesthetics of mathematics. Units are taught within the context of existing subjects and no separate time slot is allotted for aesthetic education.

Within each option there are positive and negative points, and each school will have to make the decision as to what is possible within a given setting. However, it is important to note that early discussion concerning where aesthetic education will fit into a given school situation is necessary to determine the structure of the curriculum, as the option chosen will eventually influence the amount of material which can be combined within a given grade level.

There is one note of caution to be sounded in determining where aesthetic education will be taught. We believe there is valid content within the aesthetic education program itself and that it cannot be submerged in other disciplines without losing its integrity. Therefore, although we encourage the idea that aesthetic content can permeate other areas of study, such as science and mathematics, there still is something unique in aesthetic concepts that is lost when they do not have their own identity in the curriculum. If they are submerged and even unintentionally subverted, the instructional program may lose the essence of what aesthetic education is all about and the unique qualities of the aesthetic experience will be lost, to the detriment of the educational goals of an aesthetic education program. The same aesthetic criteria that are applied to any phenomenon must be applied to the aesthetic education curriculum, as in this instance the curriculum is the phenomenon and must exemplify the aesthetic qualities it purports to teach. A non-aesthetic curriculum cannot be used to teach aesthetic education. It is a contradiction.

How then can a program be structured to reflect these means for introducing aesthetic content into the general education program? The optimum organizational strategy is to have a defined area of study, name it "aesthetic education," and include all the arts as sources of aesthetic concepts (film, literature, dance, music, the visual arts, and theater arts) for the elementary school. At the junior and senior high levels, the program can be opened out into exploration of the individual arts disciplines in more depth. In addition, content areas that can be identified as aesthetic can be inserted within non-arts disciplines, and interdisciplinary approaches to the arts can be developed at both the elementary and high school levels.

The Goals of an Aesthetic Education Program

Goals for aesthetic education have been discussed briefly earlier in this article where they were related to the goals of general education.

The linkage between the goals for aesthetic education and the overall educational goals of a school system is very important as it provides the broadest possible base of justification for it and reinforces the idea that the program is one of general, not specialized, education.

The goals for an aesthetic education curriculum at the elementary school level can be stated as broad general goals for aesthetic education as an area of study.

a. To demonstrate to the student that all phenomena in our environment have aesthetic qualities and to heighten his or her capacity for recognizing, analyzing, and experiencing these qualities.

b. To demonstrate to the student how the arts contribute to the aesthetic condition of our environment.

c. To assist the student in discovering similarities and differences among the arts and, by these means, to enhance responses to aesthetic qualities in each of the arts and demonstrate that all the arts are potential sources of aesthetic experiences.

d. To involve the student in various models of behavior which are aesthetic in nature, such as the creative or critical process.

e. To introduce the student to a wide range of views about aesthetic qualities so that he or she develops his or her own criteria and ability for making aesthetic judgments.

f. To demonstrate the importance of aesthetic values to the individual and to society.

g. To make aesthetic values relevant to the student's own life style.

These goals are also applicable to a secondary program but need to be made more specific in their application to different course offerings or subject areas at that level.

The Program Design for the Elementary School

The general goals of an aesthetic education program plus the materials which are to be developed to express them form the foundation of a curriculum in aesthetic education. However, in the past, a "take all or none" attitude toward curriculum components has allowed an isolated item of irrelevant or offensive content to preclude implementation of the entire unit. This has been one of the major problems with the implementation of innovative curricula: large-scale curriculum development programs use an elaborately sequenced system allowing for few, if any, alternatives outside the basic system for the student or school. The challenge has been to develop a flexible system of instruction, one which forms a curriculum consistent with the general goals of aesthetic education but which also allows for options to meet situational goals or community values in a specific school setting. Variations within an individual curriculum should be considered analogous to alternative paths that all converge on a single place. A program can be designed out of the available resources so that the instructional objectives for each student are reinforced.

The actual selection of content for the curriculum is a bit more difficult and complex than merely determining the placement of the content within the school curriculum. Selection of content becomes a philosophical and academic question and, unfortunately, will include some arbitrary choices. We have explained that the content for aesthetic education comes from two sources: from the philosophy of aesthetics and from the disciplines of the arts. From philosophical aesthetics we draw the broad overlying concepts that can help to organize the curriculum around larger ideas. From the arts we draw the substance for the concepts, what might be termed the examples, which are explainable to the user group. Very early in the Aesthetic Education Program we defined a number of key concepts that could be used to determine the content relative to philosophical aesthetics and to the arts. Within the curriculum materials developed by this program there is a sequence of concepts which relates to the developmental levels of students or to grade level. However, this sequencing does not constitute a comprehensive curriculum as additional concepts are to be added and integrated into the existing material.

In general, the content for aesthetic education is drawn from a variety of resources and subject areas that relate to the arts and to philosophical aesthetics. These will include aesthetic philosophy, the history and development of the arts, the art forms themselves, the artists and performers, the critic and critical language. In a comprehensive program utilizing all of the arts it is envisioned that the community with its cultural resources will be an integral part of the total program. This implies that artists, arts, and cultural institutions and organizations, and the community itself will become sources of content for aesthetic education. The criteria for what topics from these content areas shall be taught hark back to the question of who sets the values for the schools. We can all agree on some overlying concepts such as "all things have aesthetic qualities," but the arguments over curriculum planning will be phrased in terms of what will be used as an example to teach this concept.

Curriculum content for aesthetic education is really the knowledge of and methods for knowing about aesthetic phenomena. In short, the content becomes the concepts, skills, and experiences which are defined as necessary to reach the overall goals of the program. As discussed earlier, the arts play a major role as the exemplars of aesthetic phenomena. Therefore, they become the substantive base to exemplify concepts in aesthetic education or in aesthetic philosophy. The learner in this case does not change the nature of the concept: his level of development, his faculties, both mental and physical, and his past experiences influence the method of designing the curriculum that teaches the concept.

This speaks to one problem in overall curriculum design for the schools. That is, in most curriculum conflicts in the school the majority of the arguments are over the exemplars, i.e., the choice of content, when the choice runs counter to local attitudes or values, rather than about the truth or falsity of the concepts or skills involved. For example, no one can deny that Picasso painted "Guernica," the mural that describes the destruction of a town during the Spanish Civil War. One could question, in terms of a local value system, the appropriateness of showing this work of art to elementary students: the argument can be made that because the painting exemplifies violence and condemns man for his inhumanity, it is inappropriate for young children. The question here is a question of value, and a school, teacher, and community must determine the answer based on their situation. "Guernica" exists and Picasso painted it--this does not change.

The process of content selection becomes logical when it relates simply to the historical development of a discipline. The process becomes more arbitrary when the selections are to be used for aesthetic education and the appropriateness of the examples becomes the ground where the curriculum battle is waged.

The Aesthetic Education Program organized its content around six major areas:

- Aesthetics in the Physical World
- Aesthetics and Arts Elements
- Aesthetics and the Creative Process
- Aesthetics and the Artist
- Aesthetics and the Culture
- Aesthetics and the Environment

Outcomes and concepts for the student were defined for each of these centers of attention which outlined the content to be taught. A description of the centers of attention and the outcomes for each are given in part one of this report under The Development of Materials for the Elementary School.

In summary, the design of the program in aesthetic education at the elementary level will provide a vertical development by level to the sixth grade (see Diagrams 1 and 2). The content is drawn from the philosophy of aesthetics for the broader concepts and from the arts as well as community resources for exemplars of these concepts. The horizontal linkage to other subject areas will be accomplished by identifying aesthetic content applicable to other areas of study. By this means the aesthetic content is related to other parts of the curriculum providing the necessary interdisciplinary linkages and a comprehensive general aesthetic education for all students.

CENTERS OF ATTENTION
PRIMARY GRADES K-3

Aesthetics in the Physical World	Aesthetics and Arts Elements	Aesthetics and the Creative Process
Introduction to Light K & 1*	Texture K & 1	Making Patterns into Sounds 1
Introduction to Motion K & 1	Part & Whole K & 1	Examining Point of View 2
Introduction to Sound K & 1	Tone Color 1	Perceiving Sound Word Patterns 2
Introduction to Space K & 1	Dramatic Conflict 1	Relating Sound & Movement 2
	Rhythm/Meter 2	Creating with Sounds and Images 2
	Setting and Environment 2	Analyzing Characterization 2
	Non-verbal Communication 1	Creating Word Pictures 3
	Shape 2	Constructing Dramatic Plot 3
	Shape Relationships 2	Creating Characterization 3
	Shapes and Patterns 2	Arranging Sounds with Magnetic Tapes 3
	Movement 3	Forming with Movement 3
Outcomes	**Outcomes**	**Outcomes**
The student is familiar with the physical properties of light, motion, sound, and space. The student is aware of the aesthetic qualities of light, motion, sound, and space. The student engages in aesthetic encounters with light, motion, sound, and space.	The student is able to describe the part/whole relationship of elements in the physical world by identifying the elements of each art form and their relationship to the whole work. The student, given a work of art, is able to identify and describe the elements which are dominant within the work. The student begins to develop a critical language for describing works of art and the environment.	The student organizes his own method, or structure, for completing a whole work of his own design. The student can describe and analyze the aesthetic decisions he used in completing the whole work. The student transforms the elements into whole works in a number of arts disciplines and, therefore, can contrast the methods, or structures, of the individual disciplines. The student is able to criticize, using his own aesthetic criteria, his own work and that of his peers.

*The number or "K" following the package titles indicates the grade level at which the package was tested.

DIAGRAM I

CENTERS OF ATTENTION
INTERMEDIATE GRADES 4-7

Aesthetics and the Artist	Aesthetics and the Culture	Aesthetics and the Environment
Actor 4 & 5* Visual Artist 4 & 5 Choreographer 4 & 5 Writer: Poets, Storytellers, and Playwrights 4 & 5 Composer 4 & 5 Architect 4 & 5 Filmmaker 4 & 5 Critical Audience 4 & 5	Cultural Aesthetics: Where? 5 & 6 Cultural Aesthetics: Why? 5 & 6 The Individual: Aesthetics and the Culture 5 & 6 Values: Aesthetics and the Culture 5 & 6 Aesthetics and the Culture: How? 5 & 6 Aesthetics and Our Culture 5 & 6	An Aesthetic Field Trip 6 & 7 Imaginary Environments 6 & 7 Aesthetics of Personal and Public Spaces 6 & 7 Around and Through the Environment 6 & 7 Environments of the Future 6 & 7 Aesthetics of Technology 6 & 7 Aesthetics of the Arts in the Environment 6 & 7
Outcomes The student understands that artists are individuals involved with everyday human concerns as well as with artistic concerns. The student perceives, analyzes, and describes the process that artists use in creating a work of art. The student engages in activities similar to those artists use in creating works of art. The student developes a critical language for both describing and responding to works of art.	**Outcomes** The student is aware that the need to be expressive is identifiable in cultures. The student learns that the aesthetics of his culture influences his individual expression and is a resource for it. The student can describe and analyze the similarities and differences of artistic modes and forms across cultures. The student understands that cultures have aesthetic values and that what is valued as aesthetic in one culture may or may not be considered aesthetic in another.	**Outcomes** The student analyzes, judges, and values his environment for its aesthetic properties. He makes informed aesthetic judgments about problems which affect the general human condition. The student makes decisions relating functional and aesthetic considerations in the environment. The student is aware that aesthetic considerations play a major role in the affective quality of his environment. The student critically analyzes the aesthetic condition of the environment. The student demonstrates his interpretation of a quality environment by organizing art elements and environmental components.

*The numbers following the package titles indicate the grade levels for which the materials are planned. All titles refer to sets of materials in the developmental stage and are hence subject to change.

DIAGRAM 2

1. Edward Mattil, *A Seminar in Art Education for Research and Curriculum Development*, USOE Project NOV-002, (Pennsylvania State University, University Park, Pennsylvania, 1966).

2. CEMREL, Inc., is a private, non-profit corporation supported in part as an educational laboratory by funds from the National Institute of Education, Department of Education, Health and Welfare. CEMREL's Aesthetic Education Program is a long-range curriculum development program for students, K-12, and is based on a series of curriculum materials that deal with all of the arts. The program is marketed commercially as *The Five Sense Store*.

3. Manuel Barkan, Laura H. Chapman and Evan J. Kern, *Guidelines: Curriculum Development for Aesthetic Education* (St. Louis, MO., CEMREL, Inc., 1970).

4. Morris Weitz, "So, What Is Aesthetic Education?", *Report of the Aesthetic Education Center* (American Theatre Association Convention and CEMREL, Inc., 1971) p. 93, 97.

5. For a complete review of the rationale for this decision see Stanley S. Madeja, and Harry T. Kelley, "A Curriculum Development Model for Aesthetic Education," *The Journal of Aesthetic Education*, Vol. 4, No. 2, April 1970, pp. 53-63.

6. Ralph W. Tyler, *Basic Principles of Curriculum and Instruction* (Chicago, University of Chicago Press, 1950) pp. 3-28.

7. Arthur P. King, Jr. and John A. Brownell, *The Curriculum and the Disciplines of Knowledge: A Theory of Curriculum Practice* (New York, John Wiley and Sons, Inc., 1966) p. 27.

8. Franklin Bobbitt, *How to Make a Curriculum* (New York, Houghton Mifflin Co.) 1924.

9. Harold Rugg, and Ann Schumaker, *The Child-Centered School: An Approach of the New Education* (New York, World Book Co.) 1928, p. 60.

10. Barkan, et. al., *Guidelines* (St. Louis, MO., CEMREL, Inc., 1970) p. 9.

11. Ibid. pp. 86-90.

12. David Ecker, *Defining Behavioral Objectives for Aesthetic Education* (St. Louis, CEMREL, Inc. 1969) pp. 5-9.

13. See Stanley S. Madeja, "Aesthetic Education: An Area of Study," (*Art Education*, Nov. 1971), for further discussion of this.

I. Development of Instructional Materials

A. Aesthetics in the Physical World Series

Summary Statement: Aesthetics in the Physical World Series (Grades K-1)

Objectives: To identify major concepts, approaches to study, objectives, and alternate solutions to the problems of analysis and selection of curriculum content for aesthetic education applicable to the overall concept Aesthetics and the Physical World for grades K-1. To implement the development, trial teaching, and revision of units of instruction in this area by preparation of five multi-media sets of materials.

Description: Light, sound, motion, and space are fundamentals that underlie aesthetic phenomena, and each of these is explored in a separate set of materials. Activities in the materials encourage students to become involved in such things as creating their own spaces or examining the function of light and vision by experiencing them in playground games. Instructional units in this group provide an introduction to and a unification of the aesthetic dimension of the arts and the environment.

Instructional units in this Series include:

Introduction to Light	K & 1
Introduction to Motion	K & 1
Introduction to Sound	K & 1
Introduction to Space	K & 1

Outcomes: The student is familiar with the physical properties of light, motion, sound, and space.

The student is aware of the aesthetic qualities of light, motion, sound, and space.

The student engages in aesthetic encounters with light, motion, sound, and space.

Status Report: As of November 30, 1975, four instructional units will be completed.

The following information describes each instructional unit in more detail.

NIE PRODUCT: INTRODUCTION TO LIGHT
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory, Inc.)
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Sharon Bocklage, Editorial Coordinator
Rene David Michel-Trapaga, Product Developer

NARRATIVE DESCRIPTION

One of the Aesthetics in the Physical World series of Five Sense Store packages, this package introduces students to light as a basic phenomenon in the environment, one which can contribute to aesthetic experiences either naturally or through the expression of an artist. The purpose of Introduction to Light is to introduce kindergarten and primary-grade students to light as a phenomenon, both natural and artificial, which enages them to see. The students will learn about the physical properties of light--intensity, direction, and color--and how these properties affect the appearance of things and our feelings about them. Various experiences will acquaint them with the relationships between light and seeing, hearing and touching. The phenomenon of shadow will also be investigated. The students will learn that light and shadow can be used to communicate ideas and feelings. They will find, too, that light with its properties has aesthetic potential--it affects our emotions and artists use it in their work. Finally, Introduction to Light provides students with opportunities to use light creatively in exploring this aesthetic potential.

Sample Lesson
(Addressed to Teachers)

Lesson 12: Creating a Light Environment

General Description: Students work with basic properties of light in creating an environment of their own choosing.

Procedure: Explain to the students what is going to happen. Discuss with them the fact that all of you together are going to create a house or a place with cardboard boxes, and that it will be a house that uses light to make it interesting.

Get one of your largest boxes and show it to the students. Place it with the open side down in front of them. Ask them to imagine how it must look inside at this moment--light? dark? how dark? scary? happy? Now suggest to them that each box is going to be like a room in a house. Ask what should be done to get light into the rooms. (Cut windows, doors.)

> "If we want a little light, how many windows should we make? How big should they be?
> "What if we want a lot of light?
> "What if we wanted to feel scary? Happy?"

Depending on the number and age of your students, assign one box to two or more students. Provide them with a crayon or marker to indicate where windows will go and give each group or child a specific assignment:

> "Will you make a room that is very bright and happy?
> "Would you make one that has light coming in from only one side?
> "And you, one that has light coming from three sides?
> "And you, one that has only red and blue light coming in?"

Let the students work at marking where each opening will go. Then if they are very young you will have to make the openings for them in order to avoid accidents.

As your students are working, point out that people who design real buildings--architects--think about the amount of light needed in those buildings, just as they are doing. For example, architects know it's nice to have a kitchen that's sunlit and cheery; so they will try to put as many windows as possible in a kitchen they design. On the other hand, architects also know that a movie theatre can have no outside light; so they try to design a windowless building that can be lit by artificial light alone and still seem pleasant.

You might want to join some of the boxes together by making doors, and keep others separate to specify different light conditions. Students may wish to decorate their boxes on the outside with paints and on the inside with things they like or that might go with the particular lighting involved. Consider leaving this environment in your classroom for some time and using it as a place students may use for quiet activities or for reading (in the well-lit ones).

SUBJECT AREA(S)

Aesthetics in the Physical World: Visual Arts

Light as a natural and artificial phenomenon; the physical properties of light--intensity, direction, and color; how these properties affect the appearance of things and the way we feel about them; the phenomenon of shadow; communicative and creative potential of light and shadow.

INTENDED USERS AND BENEFICIARIES

Introduction to Light was designed for and formally tested with kindergarten and first-grade students.

GOAL(S) OR PURPOSE(S)

The purposes of this instructional package are for students 1) to become aware of light as both a natural and an artificial phenomenon which enables them to see; 2) to learn that light has certain basic properties which affect the appearance of things; 3) to learn that light and shadow can be used to communicate ideas and feelings; and 4) to become aware that light has aesthetic potential.

PATTERNS OF USE

Introduction to Light is a self-contained instructional package. It may be used as part of an ongoing curriculum in art; linked with other AEP units which deal with sound, space and motion and which are clustered around "Aesthetics in the Physical World."

ASSESSMENT PROVISIONS

Learning is assessed by the teacher. Guidelines for evaluating student performance and oral responses are interspersed throughout the Teacher's Guide.

TIME REQUIREMENTS

The 12 lessons in this package require seven to eight hours to complete. The lessons take varying amounts of time of from 20 minutes to an hour.

IMPLEMENTATION PROCEDURES

Introduction to Light does not require a specialist teacher. It is adaptable for use by small groups or a large group of students. A large, clear floor space is needed for several of the activities so that desks will have to be moved around. The Teacher's Guide outlines all procedures in detail. The materials, now in the final stage of production, will be attractive and durable. Consumables are minimal and are easily purchased from the publisher.

MATERIALS, EQUIPMENT AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student Materials:				
Eye masks	1 set per 6 students			
Colored acetate rectangles		*		
Wet acetate				
Reusable slide mounts				
Teacher Materials:				
Sound filmstrip		*		
Plastic tray				
Teacher's Guide				

*Prices not yet determined.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in three separate classrooms of varying ethnic and socio-economic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information on the utilization of the published version of the package on a yearly basis.

The pre-publication evaluation of this package was carried out with kindergarten students in three local schools. The majority of the students tested on a performance-oriented student interview were able to do the following tasks: use light to communicate; make use of the expressive potential of shadow; correctly identify that the positioning of the light source was the reason for the differences in appearance of three photographs of the same subject and indicate the probable position of the light source for each; and manipulate one or more of the light properties emphasized in the package (i.e. intensity, direction, and color) to achieve a specific effect. Student and teacher satisfaction with the package ranged from positive to extremely positive as measured by post-treatment questionnaires and interviews.

AVAILABILITY

Introduction to Light will have a 1975 copyright and copyright will be claimed until 1981. This package will be available in Fall, 1975 from the publisher:

The Viking Press/Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

INFORMATION CURRENT AS OF MARCH 1975

Evidence to Support Assurances and Claims for Introduction to Light

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1972). This source explains the standard procedures followed in the development and evaluation of this product. A Plan for the Hothouse Testing of Aesthetic Education Program Packages (Hall and Thuernau, 1974) explains this phase of evaluation in greater detail. As employed by the Aesthetic Education Program, hothouse evaluation consists of intensive observation of package activities in a single classroom trial. A Plan for the Pilot Testing of Aesthetic Education Program Packages (LeBlanc, 1974) explains the pilot test phase of evaluation in greater deatil. As employed by the Aesthetic Education Program, pilot evaluation consists of trial of the materials in three classroom settings of varying ethnic and socio-economic characteristics. Instrumentation tailored to the measurement of package objectives is developed and utilized in an experimental or quasi-experimental design with treated and control group classes.

Effectiveness:

An individually-administered performance-oriented student interview served as the major data-gathering instrument regarding package outcomes of Introduction to Light. The interview was administered in a small room where both natural and artificial light sources could be controlled and manipulated. In addition to the light generating and manipulating equipment built into the room, evaluators supplied the following materials for use in the interview:

- 1 Carousel Projector
- 4 Squares acetate
  - 1 yellow
  - 1 red
  - 1 blue
  - 1 clear
- 4 Squares heavy art paper
  - 1 yellow
  - 1 red
  - 1 blue
  - 1 white
- 4 Flashlights
  - 1 yellow
  - 1 red
  - 1 blue
  - 1 clear
- 1 Regular desk lamp
- 1 High intensity lamp
- 5 Light bulbs
  - 1 yellow
  - 1 blue
  - 1 pink
  - 1 green
  - 1 clear
- 3 Photographs
  - 1 side lit
  - 1 back-side lit
  - 1 lower-front lit
- 4 Slides
  - 1 transparency (castles)
  - 1 transparency (marker drawing)
  - 1 opaque
  - 1 clear acetate

Ability to Use Light to Communicate:

To see if students could set up a system of light signals as a form of communication, they were asked if they could use light to tell the interviewer when to stand up and sit down. Responses were recorded in a way that showed whether or not the student set up a code, and which light property was used in that code. Seventy-one percent of the students made appropriate responses. All but one student used a simple on-off code (intensity). One student used direction (up-down) to communicate.

Using the Expressive Potential of Shadow:

To explore each student's grasp of the expressive potential of shadow, the following question was asked: "Could you show me, using just your shadow, how you would feel if you had just spent all your money to buy an ice cream cone and on the way home you dropped it on the street?" Full credit was given if the student used only his shadow to convey the emotion while partial credit was given if the child made a shadow but the emotion was mainly conveyed through facial expression or voice. Forty-three percent of the students received full credit and 43% received partial credit.

Perception of Light Direction and Its Effects:

To test perception of the direction of light in a photograph, each student was shown three pictures of the same subject, lighted from three different directions. He was asked to tell what was different about the pictures, and then to tell where the light was coming from in each picture. Eighty-six percent of the students tested appropriately identified what was different about the pictures. Sixty-four percent could correctly position the light source.

Ability to Recognize and Manipulate Light Properties:

First the student was told to "look all around the room—up and down, on the desk, the bed, and see how many things you can find that would make light." The student was then asked to change the room's lighting in as many different ways as possible. The interviewer offered to help with any changes which the student could not physically perform. Responses were recorded as pertaining to intensity, direction, color, or movement. Students averaged 5.1 responses each. Changes involving color and intensity were the most frequently made responses. Results are tabulated on page 25 of the Pilot Report.

Later in the interview the students were asked "Could you make yourself look scarey, just by changing the light?" Student responses to the question were recorded and catergorized as pertaining to intensity, direction, color, or movement. Sixty-eight percent of the students made appropriate responses. The distribution of responses by type of light change initiated are tabulated on page 27. All of the direction responses also utilized color which made it the most frequently used property.

Student Satisfaction:

Claims of student involvement with and enjoyment of the materials is based on observations made during the hothouse trial of the package and data from the interview/protocols of all three teachers using the package. (See Hothouse Report, Analysis of Individual Activities, pp. 9, 13, 23, 29, 33, 36, 38 and Post-Trial Teacher Interview, p. 43.) Both pilot teachers said their students looked forward to each lesson and one added that her children were very enthusiastic, especially toward the slide show (Pilot Report, p. 32).

Teacher Satisfaction:

All three teachers reported that they would teach the package again. The hothouse teacher and one pilot teacher would recommend it to other teachers even without the planned revisions. The third teacher felt that it could be more appropriately recommended to first and second grade teachers rather than kindergarten. (This teacher's students were from an economically depressed area and during the student interview demonstrated considerably less fluent verbal skills than students at the other test sites.) Supporting data will be found on p. 44 of the Hothouse Report and p. 33 of the Pilot Report.

Both pilot teachers agreed that the specific objectives and management strategies given for each activity were clearly communicated (Pilot Report, p. 30). Neither teacher had any criticisms of the organization or format of the Teacher's Guide.

Further revisions in Introduction to Light are being made prior to publication, based on the information gathered during the pilot trials of the materials, including teacher recommendations.

NIE PRODUCT: INTRODUCTION TO MOTION
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
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Educational Laboratory, Inc.)
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Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Gregg Mayer and Susan Ingham, Product Developers

NARRATIVE DESCRIPTION

The Aesthetics in the Physical World series of the Aesthetic Education Program includes this instructional package, which deals with motion as a basic phenomenon in the environment. The package focuses on both the functional aspects of motion and its aesthetic aspects. The kindergarten to first-grade student works with a slide/tape presentation of these aspects of motion and explores her or his own body to discover its potential for movement. The student becomes aware through observation and exploration of movement all around and his or her ability to use movement functionally and aesthetically. The student also experiences works of art--visual art, literature, music, and dance--in which movement is important to the artist's expression of a thought, feeling, or idea. In this way the student becomes familiar with how movement may be used aesthetically in many ways.

This package encourages students to 1) investigate their own bodies to see how many ways they can move; 2) explore their everyday world for moving things, observing how these things move both similarly and differently from their own bodies; 3) explore areas more distant than their home and classroom for movement--they examine the city and the county and think about how the seasons affect movement; and 4) experience movement in the subject matter or media of a variety of art works--in paintings, in musical compositions, in literature.

SUBJECT AREA(S)

Aesthetics in the Physical World: Dance/Visual Art/Sensory Perception

Awareness of the ubiquitous nature of movement in the environment; awareness of the human body's potential for movement; awareness that movement is used as subject matter and/or through the elements (texture, color, rhythm, etc.) in the expression of thoughts, feelings and ideas in works of art.

INTENDED USERS AND BENEFICIARIES

Introduction to Motion, still in the design stage, is being prepared for kindergarten and first-grade students.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package is to teach students 1) that movement is a basic phenomenon in their environment and their own bodies, and 2) that movement can be used by artists in their art works to express thoughts, feelings, and ideas.

PATTERNS OF USE

Introduction to Motion will be a self-contained unit of instruction with activities that are cumulative. It may be used as part of an ongoing curriculum in dance; linked with other AEP units which are related to basic phenomena in the physical world and clustered around "Aesthetics in the Physical World;" and used with science programs.

ASSESSMENT PROVISIONS

Assessment for the learning activities will be designed during development of the instructional unit.

TIME REQUIREMENTS

Introduction to Motion is planned to take approximately 10 hours to complete, depending on class size and utilization of suggested "additional activities." Teachers will probably want to devote about 30 minutes per day everyday or two to three days per week to the materials.

IMPLEMENTATION PROCEDURES

Introduction to Motion does not require a specialist teacher. It may be taught in small groups or in whole groups. Students will require a large clear space for moving. The Teacher's Guide will outline all procedures for the teacher.

MATERIALS, EQUIPMENT AND PERSONNEL REQUIREMENTS

This information has yet to be determined.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this unit of instruction.

ASSURANCES AND CLAIMS

The instructional unit, Introduction to Motion is presently in development. When completed it will be tested as defined in the Basic Program Plan 1972. At that time appropriate assurances and claims will be made.

AVAILABILITY

The anticipated completion date of Introduction to Motion is November 1975. The package will be copyrighted.

INFORMATION CURRENT AS OF MARCH 1975

NIE PRODUCT: INTRODUCTION TO SOUND
(Part of the Aesthetic Education Program)

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Sharon Bocklage, Editorial Coordinator
Edward Sweda, Product Developer

NARRATIVE DESCRIPTION

One of the Aesthetics in the Physical World series of Five Sense Store package, Introduction to Sound helps students in kindergarten and the primary grades become aware that sound is a basic phenomenon in the environment and that sound can contribute to aesthetic experiences, either naturally or through the expression of an artist. The students will be introduced to sound as a phenomenon inherent in many objects in their environment. They will find that every sound has a basic quality--literally, the "sound" of the sound--and certain characteristic elements--duration, intensity, and pitch (a sound's own ranges of high to low and loud to soft and the length of time it lasts, or can be heard). Introduction to Sound is intended to bring to the students' attention the multitude of sounds in their everyday surroundings and to make them aware of the potential of these sounds as musical expression.

In this set of materials students work with imagined and real sounds and have opportunities to organize and manipulate these. In this way students do much the same thing that a composer does when he first imagines how a musical idea will sound when performed by the instruments he has chosen. Using their voices, as well as genuine sound-producing objects to imitate sounds, students see how they can vary sound by manipulating its elements--duration, intensity, and pitch; how they can organize sounds into different patterns; and how they can perform their compositions. They tape record some of their work so that they can analyze it for possible change and improvement.

By working with sounds with which they are already familiar and comfortable--a dog's bark, the roar of a car's engine--students begin to understand the possibilities of sound, sound from the farthest reach of the imagination to sound falling within the traditional range of the symphony orchestra. This approach is meant to stimulate an initial confidence in the students about creating with sound, a confidence that can lead them into more complex modes of understanding and expression with this phenomenon. The approach is based on the premise that when an individual uses all of his senses to create, imagine, or organize sounds, those sounds gain sepcial significance to him. It is this special significance--a personal meaning--which should reinforce the students' motivation to work with sound and to appreciate others' work with sound.

Sample Lesson
(Addressed to Teachers)

Lesson Three: Changing Sounds by Manipulating Duration, Intensity, and Pitch

Concept: A sound can be altered by manipulating one or more of its basic elements.

General Objective: The students will be able to alter sounds by manipulating duration, intensity, and pitch simultaneously.

Procedure: Discuss the activity with the students in the following manner:

"The last time we worked with this Board, we chose these sound cards and we placed element cards underneath them. Today we will continue to choose element cards. But instead of placing one element card under each of the sounds, we will choose one sound and put element cards underneath it until we have one duration card, one intensity card, and one pitch card under that sound."

Explain to the students the following rules for working with element cards:

"You will pick one card for each element and place these under one of the sounds on the Board. Only one of each element should be placed under each sound card. If you choose a pitch card but you already have a pitch card, then you will have to put the second one back on the stack. We will go through all of the elements for one sound before working with several sounds plus elements."

Now shuffle the element cards and put them in one pile face down. Choose one of the sounds to work with, and ask someone to pick the first element card. Have that student put it under the cound. After each card is chosen and placed in the column under the sound, tell the students to make the sound as they think it would sound when modified by that element plus any other elements under that sound card. As before, students may use their voices or any objects around them to make the sounds. Remember that each card affects the original sound in some way. How much or how little depends on the students and you. The important thing is to see that the original sound is in fact altered by each element card so that the final sound is the product of all the cards.

Help the students concentrate on the changes they are making. Urge them to explore those changes until they have arrived at what they feel is the best sound of the sound when altered by all the elements.

After completing a single sound, choose elements for several more sounds. Each time a card is drawn have the students work only on the sound under which that card is placed. Once the students can remember the new quality, have them sound off the whole Board, from left to right, with special attention to the new one.

Tape-record the experience for playback and discussion.

SUBJECT AREA(S)

Aesthetics in the Physical World: Music

Introduction of sound as a phenomenon inherent in many objects in the environment; basic qualities of sound; organization and manipulation of real and imagined sounds.

INTENDED USERS AND BENEFICIARIES

Introduction to Sound was designed for use by kindergarten and first-grade students.

GOAL(S) OR PURPOSE(S)

The purposes of this instructional package are for students 1) to become aware that sound is a basic phenomenon in the environment; 2) to learn that sound can contribute to aesthetic experiences, either naturally or through the expression of an artist; 3) to become aware of the multitude of sounds in their everyday surroundings and of the potential of these sounds as musical expression.

PATTERNS OF USE

Introduction to Sound is a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in music or linked with other AEP packages which deal with motion, light, and space, and which are clustered around "Aesthetics in the Physical World."

ASSESSMENT PROVISIONS

While there is no formal testing, learning is assessed by teacher and student. Student performance and oral response is assessed. Guidelines for teacher evaluation are written in the Teacher's Guide.

TIME REQUIREMENTS

Introduction to Sound takes a minimum of 7 hours to complete. Additional discussion or repetition of parts of the lessons can lengthen this time. The eleven lessons require from twenty minutes to one hour to do.

IMPLEMENTATION PROCEDURES

Introduction to Sound does not require a specialist teacher. The lessons may be done with a small group or with a whole class. The Teacher's Guide carefully outlines all procedures.

The teacher is encouraged to let students expand their exploration of sounds and sound composition.

The materials in Introduction to Sound are in the final pre-publication stage of design and will be extremely durable. There are no consumable items in this package.

MATERIALS, EQUIPMENT AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student Materials:				
Sound cards	1 set per		There are no	
Blank sound cards	6 students	*	consumables	
Element cards				
Silence cards				
Teacher Materials:				
Sound tape in four parts		*		
Sounding board				
Blank recording tape				
Teacher's Guide				

*Prices not determined.

Summary Cost Information

The amount of materials needed for this package will not vary with the number of students being taught.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training in music can implement this instructional package. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socio-economic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eleminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information about the utilization of the published version of the packages on a yearly basis.

The pre-publication evaluation of this package was carried out with kindergarten and first grade students in local schools. The results of specially constructed tests indicate that although students who had received instruction based on the package and those who were not were equally able to distinguish the dynamic level of sounds. Students exposed to the package were better able to discriminate sounds of different pitch, duration, and to perceive silence. Package groups also were able to perform at or above the criterion level on a task involving rhythm.

AVAILABILITY

Introduction to Sound bears a 1975 copyright date and copyright is claimed until 1981. It will be available in Fall 1975 from the publisher:

The Viking Press/Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

INFORMATION CURRENT AS OF MARCH 1975

Evidence to Support Assurances and Claims for Introduction to Sound

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1972). This source explains the standard procedures followed in the development and evaluation of this product. A Plan for the Hothouse Testing of Aesthetic Education Program Packages (Hall and Thuernau, 1974) explains this phase of evaluation in greater detail. As employed by the Aesthetic Education Program, hothouse evaluation consists of intensive observation of package activities in a single classroom trial. A Plan for the Pilot Testing of Aesthetic Education Program Packages (LeBlanc, 1974) explains the pilot test phase of evaluation in greater detail. As employed by the Aesthetic Education Program, pilot evaluation consists of trial of the materials in three classroom settings of varying ethnic and socio-economic characteristics. Intrumentation tailored to the measurement of package objectives is developed and utilized in an experimental or quasi-experimental design with treated and control group classes. A hothouse and pilot report are complete for Introduction to Sound.

Effectiveness:

Kindergarten and first grade students from a variety of socio-economic levels served as both treatment and control groups. The "treated" students received instruction from a pre-publication version of the package. There were three components of the sound elements test. First, students were asked to perceive differences in dynamics of sound. Secondly, they were to perceive differences in pitch, and finally, they were to perceive differences in duration. The results were:

Dynamics Perception

- no significant difference between package and control
- significant difference (.01 level) between schools, suburban school higher

Pitch Perception

- significant difference (.01 level) between package and control, package students scored higher
- no significant difference between schools

Duration Perception

- significant difference (.05 level) between package and control, package students scored higher
- significant difference (.05 level) between schools, suburban school higher

Criterion-referenced rhythm performance: Because of the package specific language used to ask students to copy rhythms, only students who received the package were asked to perform. The criterion to which the performance was reference was .50. Students in school A gained a mean score of .67 and in school B a mean score of .72 (out of a possible 1.00).

NIE PRODUCT: INTRODUCTION TO SPACE
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional Education Laboratory, Inc.)
3120 59th Street
St. Louis, Missouri 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Rene Michel-Trapaga, Product Developer

NARRATIVE DESCRIPTION

This package, part of the Aesthetics in the Physical World group of the Five Sense Store, helps students become aware of spatial considerations in the world at large. Through a filmstrip presentation the students are made aware of what space is and how it is used in the environment.

The students also explore the spatial elements of height, width, and depth; the visual cues to degrees of distance in space; and the difference between two-dimensional and three-dimensional spaces.

Further, the students become familiar with some principal considerations in using and manipulating space. Through special manipulatives and activities they explore the relationship between a space of a specific size or shape and the number of given objects which can fill that space. And they explore how the properties of a space limit the amount and kinds of movement within it.

Lastly, the students use their classroom as a laboratory for making decisions about the use of space. As they redesign their classroom they draw on the functional and aesthetic considerations they have been exposed to throughout Introduction to Space.

Sample Lesson
(Addressed to Teachers)
Lesson 2

General Description: Through this experience the students will increase their ability to identify spaces and relate spaces to specific functions.

Procedure: Introduce the students to a space-function guessing game. Use the questions below as a beginning, and then add your own. (The students will have viewed the inintroductory sound filmstrip in the previous lesson.)

Teacher	Possible Response
I will name the thing that takes up a space or the thing that happens there. Then you see if you can give me the name of that space. Let me give you an example. If I say a space for airplanes what would you say?	Airport.
Now if I say a writing space what would you say?	Table, desk, Chalkboard.
Yes. We could write on any of those space, couldn't we? Let's try some more.	
What if I said a car space? What could that mean?	Something like a parking lot.
Running space?	Sidewalk, gym, playground.
Sleeping space.	Bed.
Cereal space.	Bowl.
Teeth space.	Mouth.
Monkey space.	Case, zoo, jungle.
Cooking space.	Stove, pot.
Boat space.	River, lake, water.
Are we in a space now? What kind of space are we in?	Yes. Gym, classroom (or where-ever you are).

Be sure that the responses given by the students name a space which fits the object of function described. However, make allowances for whimsical responses typical of young children and expect to get different answers which may be suitable for the same question. Include both two-dimensional and three-dimensional space-function exemplars in your game.

When you have concluded the game, lead the students in considering the general nature of space. Have students give their own definitions of space. Ask: "So, now what do you think a space is?"

Be satisfied with very general responses. Typical answers given by five-, six-, and seven-year-old children may be: "an empty place, where things are, where the planets are, it's every place, inside my shoe, space to run (fly, walk, etc.). I have a space at home," etc. Further exposure to the set of materials will add to the students' understanding of space.

You may want to try a variation of this game by allowing one student or a group of students to give the space-function clues to the rest of the children.

SUBJECT AREA(S)

Aesthetics in the Physical World: Visual Art/Sensory Perception

Space is a basic phenomenon of the environment which can be manipulated for functional and aesthetic purposes. Fixed spaces can be recognized and described by their shapes and sizes. Distance from an object plays a major role in the perception of that object. As an object recedes from the viewer it 1) seems smaller, 2) loses detail, and 3) may be partially covered by nearer objects. Three-dimensional space has width, height, and depth. Two-dimensional space has height and width, but no appreciable depth, although it may give the illusion of depth, as in a photograph. The size and shape of a given space determine the number and arrangement of the objects which can fit within it. Likewise, the size and shape of the objects determine the number and arrangement of them which can fit within a given space. People can make and effect decisions about their use of space both in their daily lives and in works of art.

INTENDED USERS

The package was tested at the kindergarten and first-grade levels. But test results indicate that the package may be more appropriate at the first-grade rather than the kindergarten level. Informal reports indicate that second and third graders could use the package as well.

GOAL(S) OR PURPOSE(S)

The purpose of this package is 1) to introduce students to space as a phenomenon and to involve them in working with its elements of height, width, and depth; 2) to develop an awareness of functional and aesthetic considerations relating to space; and 3) to involve the students in creative problem-solving related to the functional and aesthetic uses of space.

PATTERNS OF USE

Introduction to Space is a self-contained set of materials with activities that are sequential and cumulative. It may be linked with the rest of the packages in the Aesthetics in the Physical World group; used in connection with other AEP packages in which space plays a part, such as movement, environment, and theatre packages; used to develop gross motor skills and fine visual perception skills; and used in relation with an elementary physical science program.

ASSESSMENT PROVISIONS

Informal assessment provisions are interspersed throughout the activities. Learning is assessed by teacher and student. Guidelines to aid the teacher in assessing student performance are built into the package.

TIME REQUIREMENTS

Introduction to Space requires from 12 to 15 hours to complete, depending on class size and utilization of additional activities. Activities vary in length from 15 minutes to one hour.

IMPLEMENTATION PROCEDURES

Introduction to Space does not require a specialist teacher. The package was tested with kindergarten and first-grade children but may be used with any primary-level students. The activities are designed for use either by a large or small group of students, and the active participation of the teacher is greatly encouraged. Results from classrooms which tested the materials showed that groups in which the teachers were willing to give suggestions and to direct activities had much more success than those where the teacher functioned only as an observer.

Many of the activities require a good deal of movement and need a large area of clear space. The teacher's guide carefully outlines all procedures.

Additional activities encourage the teacher to carry the concepts beyong the completion of the package.

MATERIALS, EQUIPMENT, AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
1 Sound filmstrip 1 large photograph 3 rugs	(as indicated in column one)	Not yet available	No consumable items	

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
2 large cardboard circles				
2 large cardboard squares				
40 small circles				
40 small squares				
1 Teacher's Guide				

Summary Cost Information

The materials needed for this package are the same regardless of the number of students being taught. Cost for one complete unit is not yet available.

Personnel Required for Product Adoption and Implementation

The classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher and by CEMREL, Inc. Curriculum consultation is also available from CEMREL, Inc. Costs for these services can be obtained from each organiztion.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in three separate classrooms of varying ethnic and socio-economic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information on utilization of published materials.

The pilot evaluation of this package was carried out with kindergarten and first grade students in local schools. A specially constructed interview was developed to assess the outcomes of instruction with the package. Students using the package scored statistically significantly higher than control group students on the conceptual segment of the interview. In doing this they demonstrated a heightened awareness of space in their environment and a greater breadth of concept regarding the nature of space. Student and teacher satisfaction with the package was moderate as measured in questionnaires and interviews administered after completion of the package.

AVAILABILITY

Introduction to Space will be available from the publisher in the Fall of 1975. It carries a 1975 copyright date, and copyright is claimed until 1981.

The Viking Press/Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

INFORMATION CURRENT AS OF MARCH 1975.

Evidence to Support Assurances and Claims for Introduction to Space

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1969, 1972), and the Supplement to the Basic Program Plan, Aesthetic Education Program (CEMREL, 1973). These sources explain the standard procedures followed in the development and evaluation of this product. Both hothouse and pilot level evaluations were conducted for Introduction to Space, and the reports of each trial are available. As employed by the Aesthetic Education Program, hothouse evaluation consists of intensive observation of package activities in a single classroom trial. Pilot evaluation consists of trial of the materials in classroom settings of varying ethnic and socio-economic characteristics. Instrumentation tailored to the measurement of package objectives is developed and utilized in an experimental or quasi-experimental design with treated and control group classes.

Product Effectiveness:

Claims of product effectiveness are supported by the results of a specially constructed interview. The interview began with a conceptual segment, posed by the question, "What is space?" Questioning and scoring proceeded along the lines of the flow chart on page 21 of the Pilot Report. It was decided that a wide range of student responses to the initial question would be accepted. The only unsatisfactory responses were those which defined space in an exclusively astronomical vein, or defined it as solid objects such as a baseball, book, or piece of chalk.

Maximum points were earned by students who could give a satisfactory initial response and follow it up with two good examples of space. For them, this interview segment was completed at that point. Students who failed to respond acceptably on first try were asked if space could be any place else, and if they responded favorably to this they were then asked to name examples. If they were unable to furnish examples, the interviewer offered examples, asking the student if they could be called spaces, and if so, how could he tell. The questions were posed in a standard sequential order, and credit was awarded on a hierarchical basis ranging from seven points down to one. The structure of this task was similar to that of a cumulative scale in the style of Guttman. If a student responded correctly to the first and most difficult questions, it was assumed that he or she would be able to answer the easier ones successfully, and credit was automatically allowed.

Package students at both schools did dramatically better than their control group counterparts on this task, which was scaled to reward unprompted correct responses showing breadth of concept regarding space and giving correct examples of it. A two-way analysis of variance was conducted upon the scores, and the effect of package vs. control treatment was found to be statistically significant at the .01 level, with package students earning the higher scores. Results and analysis are shown on page 29 of the Pilot Report.

Student and Teacher Satisfaction:

Claims of student and teacher satisfaction are supported by responses to a questionnaire and interview administered to teachers at the conclusion of the pilot test. These responses are discussed in detail on pages 35 through 40 of the Pilot Report.

B. Aesthetics and Arts Elements Series

Summary Statement: Aesthetics and Arts Elements Series (Grades 2-3)

Objectives: To identify major concepts, approaches to study, objectives, and alternate solutions to the problems of analysis and selection of curriculum content Aesthetics and Arts Elements for grades 2-3. To implement the development, trial teaching, and revision of units of instruction in these areas by preparation of three multi-media sets of materials, which, when added to the materials completed before the start of the NIE contract, will complete this series, approximately 12 instructional units in all.

Description: Activities in these instructional units encourage students to recognize elements of aesthetic phenomena both in the examples presented and in their daily world. Students using these sets of materials learn to identify elements such as, tone color in music, shape in the visual arts, movement in the environment; to recognize them as a part of the arts; and to relate them to the structure of a work of art.

Instructional units in this Series include:

Texture	K & 1
Part & Whole	K & 1
Tone Color	1
Dramatic Conflict	1
Rhythm/Meter	2
Setting and Environment	2
Non-verbal Communication	1
Shape	2
Shape Relationships	2
Shapes and Patterns	2
Movement	3

Outcomes: The student is able to describe the part/whole relationship of elements in the physical world by identifying the elements of each art form and their relationship to the whole work.

The student, given a work of art, is able to identify and describe the elements which are dominant within the work.

The student begins to develop a critical language for describing works of art and the environment.

Status Report: As of November 30, 1975, 11 instructional units will be completed.

The following information describes each instructional unit in more detail.

NIE PRODUCT: TEXTURE
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional
Educational Laboratory, Inc.
3120 59th Street
St. Louis, Missouri 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Nadine J. Meyers, Product Developer

NARRATIVE DESCRIPTION

This package, one of the Aesthetics and Arts Elements group of Five Sense Store packages, is designed to help students understand that texture has to do with both touching and seeing. A set of texture bags provides an assortment of tactile stimuli on which package activities are based. Sets of texture photographs provide visual correlates for the tactile stimuli to focus on how textures look and feel. Students use the tactile stimuli with a set of word cards to find the words to describe what they are touching. Photographs of art works encourage the students to transfer their learning to the exploration of texture in works of art. Through a group of art activities, students create simple art works which have textures.

This package will encourage students: 1) to look for, perceive, and describe qualities of texture in their environment and in the arts; 2) to perceive and identify relationships between tactual experience and movement; 3) to perceive correlations between visual and tactual properties; and 4) to identify textural qualities in visual art referents.

Sample Lesson
(Addressed to Teachers)

Activity 9: Identifying Textural Qualities in Art Reproductions

General Description: The students will examine visual art reproductions for their textural qualities and compare them with the texture materials they feel in their bags.

Background Information: The following information about the textural qualities in works of art is not intended to be taught to your students but will help you determine what they are looking at when they match the bags with the reproductions.

Visual artists employ texture in various ways. An artist employs texture in a tangible form by using actual materials, such as newspaper, seeds, wood, or cloth, in combination with paint, or by themselves. Works where it is actually possible to feel these textures include collage and assemblage, artistic compositions combining these various materials into a unified design on canvas or board. A painter also creates texture on a two-dimensional surface by the heavy application of paint, gesso, or polymer, thus causing the pigment to stand out in relief. This kind of textural painting, termed "impasto," can be seen in many of the paintings of Vincent van Gogh, Maurice de Vlaminck, and Jackson Pollock. Another way the painter creates texture is by mixing paint with sand, sawdust, or other rough materials to get a textural quality. The painter and the sculptor use tools, such as the palette knife, a sponge, a pen, or a gouge, to produce individual texture characteristics. And the sculptor chooses materials - wood, clay, wire, stone - to work with, either enhancing the existing textures or manipulating them to create additional textural qualities. Thus artists' use of texture suggests that texture is perceived by more than one sense. Artists ask us to see how a surface looks, to imagine what it feels like, and, in some cases, even to touch the work of art.

Procedure: Instruct the students to put all eight bags in front of them. Distribute the same art reproduction to all the students. For your convenience, the reproductions have been listed in an easy-to-hard progression from one to twelve. That is, the texture in number one is relatively easy to identify, and that in number twelve is relatively difficult. This is simply a suggested order for dealing with the reproductions.

Say to the students,

> "Find the bag or bags that have textures that are the same or nearly the same as the textures you see in this work of art."

In most cases several bags will be needed to fully describe the textural qualities in a painting. The students can further explore the different textures they see by sharing their responses and discussing their different choices.

In relating texture and subject matter, ask general questions:

> "What do you think the artist was trying to tell us?
> "What if he used a different kind of texture?
> "Would he be saying the same thing? Would you feel the same about the work?
> "What kind of texture would you use?
> "What kind of mood has the artist created? Happy, sad, spooky?
> "Did the textures he used help create the mood?"

One point you might want to note for your students, if they mention it, is that some of the art works shown in the photographs are sculptures and paintings which use "impasto," so that the actual work of art could be felt in the same way as the materials in the bags. Other paintings, however, are flat and only make us think we can feel the textures in them. Some painters give us the feeling of a third dimension through the use of color, or lights and darks on a totally flat surface; others give us this feeling by actually building up the paint or by adding other materials to the canvas.

The following is a list of the twelve art reproductions with the texture bags that would be appropriate choices for each one. These choices are included to help you guide the students through the activity, but they are not definitive. There are a variety of possible responses for each reproduction. If you do not understand the students' choices, find out what they were looking at and touching when they made their decisions. If they can give you a valid reason for choosing a specific texture, accept it. For example, when asked why she chose the purple bag (stipple mat) and the orange bag (foam rubber) for number one, a student replied, "The shapes in the purple bag are round like the ones in the picture; and the material in the orange bag can be pressed down just like I think the shapes in the picture could be if I touched them."

1. Victor Vasarely, CTA-104-E
   stipple mat (purple bag), sponge (orange bag)
2. Vincent van Gogh, The Starry Night
   shag carpet (light blue bag), matted fiber (yellow bag), synthetic fur (red bag)
3. Maurice de Vlaminck, Houses at Chatou
   shag carpet (light blue bag), synthetic fur (red bag)
4. Henri Matisse, The Purple Robe
   shag carpet (light blue bag), wire screen (dark blue bag), synthetic fur (red bag), ridged material (pink bag), stipple mat (purple bag)
5. Claire Falkenstein, Point as a Set
   matted fiber (yellow bag), shag carpet (light blue bag), wire screen (dark blue bag)
6. Auguste Renoir, On the Terrace
   synthetic fur (red bag), sponge (orange bag), shag carpet (light blue bag), matted fiber (yellow bag)
7. Jackson Pollock, Grayed Rainbow
   matted fiber (yellow bag), shag carpet (light blue bag), synthetic fur (red bag)
8. Constantin Brancusi, Mademoiselle Pogany
   acetate (green bag), stipple mat (purple bag), matted fiber (yellow bag)

9. Gustav Klimt, The Park
   sponge (orange bag), stipple mat (purple bag), shag carpet (light blue bag), matted fiber (yellow bag), synthetic fur (red bag)

10. Victor Vasarely, Capella
    ridged material (pink bag), wire screen (dark blue bag), acetate (green bag), stipple mat (purple bag)
    Tell the students to squint and look for the hidden shapes in this photograph. Then ask which texture has that shape (the texture in the purple bag-stipple mat, for the circles).

11. Yves Tanguy, Rapidity of Sleep
    acetate (green bag), sponge (orange bag), fur (red bag)

12. Henri Rousseau, The Waterfall
    shag carpet (light blue bag), ridged material (pink bag), acetate (green bag)

When your students have finished matching the twelve reproductions with the texture bags, you might want to compare the reproductions with one another to see how the same subject matter was handled with different textural effects. A grouping of the reproductions is provided below. Some of the titles appear in more than one group.

In talking about the reproductions, emphasize the feelings conveyed by the different textural renderings. Now would be a good time to show the color slides, pointing out to your students the difference that a new element, color, makes in works of art.

Landscapes:

Rapidity of Sleep (Tanguy) Slide 1
Houses at Chatou (Vlaminck) Slide 2
The Waterfall (Rousseau) Slide 3
The Park (Klimt) Slide 4
The Starry Night (van Gogh) Slide 5

Abstracts:

Point as a set (Falkenstein) Slide 6
Capella (Vasarely) Slide 7
CTA-104-E (Vasarely) Slide 8
Grayed Rainbow (Pollock) Slide 9
Mademoiselle Pogany (Brancusi) Slide 10
Rapidity of Sleep (Tanguy) Slide 1

Figures:

On the Terrace (Renoir) Slide 11
The Purple Robe (Matisse) Slide 12
Mademoiselle Pogany (Brancusi) Slide 10

This activity should be extended by a visit to an art museum to look for textures in real paintings and sculptures.

SUBJECT AREA(S)

Aesthetics and Arts Elements: Visual Art

Exploration of the individual qualities which distinguish textures from one another; relation of texture and movement; relation of the visual and tactual properties of texture; the artist's use of real and illusionary textures in works of art.

INTENDED USERS AND BENEFICIARIES

Texture was designed for and formally tested with kindergarten and first-grade students.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package is 1) to let students experience texture tactually and visually and kinesthetically, and 2) to help them become more aware of it in the natural environment, the man-made environment, and in works of art.

PATTERNS OF USE

Texture is a self-contained instructional package with activities that explore texture from various sensory aspects. It may be used as part of an ongoing curriculum in art; linked with other AEP packages which are related to music, dance, literature and theatre and which are clustered around "Aesthetics and Arts Elements;" and used with perceptual development programs.

ASSESSMENT PROVISIONS

While there are no formal tests, teacher and students assess learning by judging student products and oral responses. Guidelines for assessing the responses are written in the Teacher's Guide.

TIME REQUIREMENTS

The activities in Texture require from 12 to 20 hours to complete, depending upon how much discussion time is allowed and how many of the art activities are done. The activities are divided into 30 minute periods.

IMPLEMENTATION PROCEDURES

Texture does not require a specialist teacher. Students work in pairs on their own or within a larger group. A fairly large amount of space is needed for students to spread out their materials.

MATERIALS, EQUIPMENT AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student Materials:				
3 Sets of texture bags (8 in each set)	1 set per 6 students	*	No consumables	
6 Sets of photographs (12 in each set)				
3 Sets of art reproductions (12 in each set)				
Teacher Materials:				
1 Set of word cards (40)				
1 Mystery bag		*		
1 Set of 35mm color slides (12)				
1 Teacher's Guide				

*Cost not yet determined...

Summary Cost Information

Depending on classroom organization, units can be purchased in varying multiples of six, e.g., 12-student, 18-student, 24-student sets with teacher materials, etc. Student materials and teacher materials can be purchased separately.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socio-economic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials.

The pre-publication evaluation of the package was carried out with kindergarten classes in local schools representing a variety of socio-economic levels. While the differences in achievement on specially constructed tests were not statistically significant, package groups were better able to relate photographs of surfaces of textures to similarly textured natural objects and to discriminate tactually between textures on the basis of verbal instructionas. Student and teacher satisfaction with the package was high, as indicated by an orally administered post-package questionnaire.

AVAILABILITY

Texture was copyrighted in 1974 and copyright is claimed until 1981. It will be available as of Spring 1975 from the publisher/distributor:

The Viking Press/Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

INFORMATION CURRENT AS OF MARCH 1975

Evidence to Support Assurances and Claims for Texture

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1972). This source explains in detail the standard procedures followed in the development and evaluation of this product. A hothouse evaluation report was prepared for this package, and describes the results of intensive observation of package activities in a single classroom trial. A pilot evaluation report shows the results of package trial in three different classroom settings. Both hothouse and pilot evaluation reports were prepared on Texture. An Overview of Development and Evaluation of the Five Sense Store (Edwards, 1974) explains the procedure through which the program continues to gether information on products which are presently being used in the field.

Effectiveness:

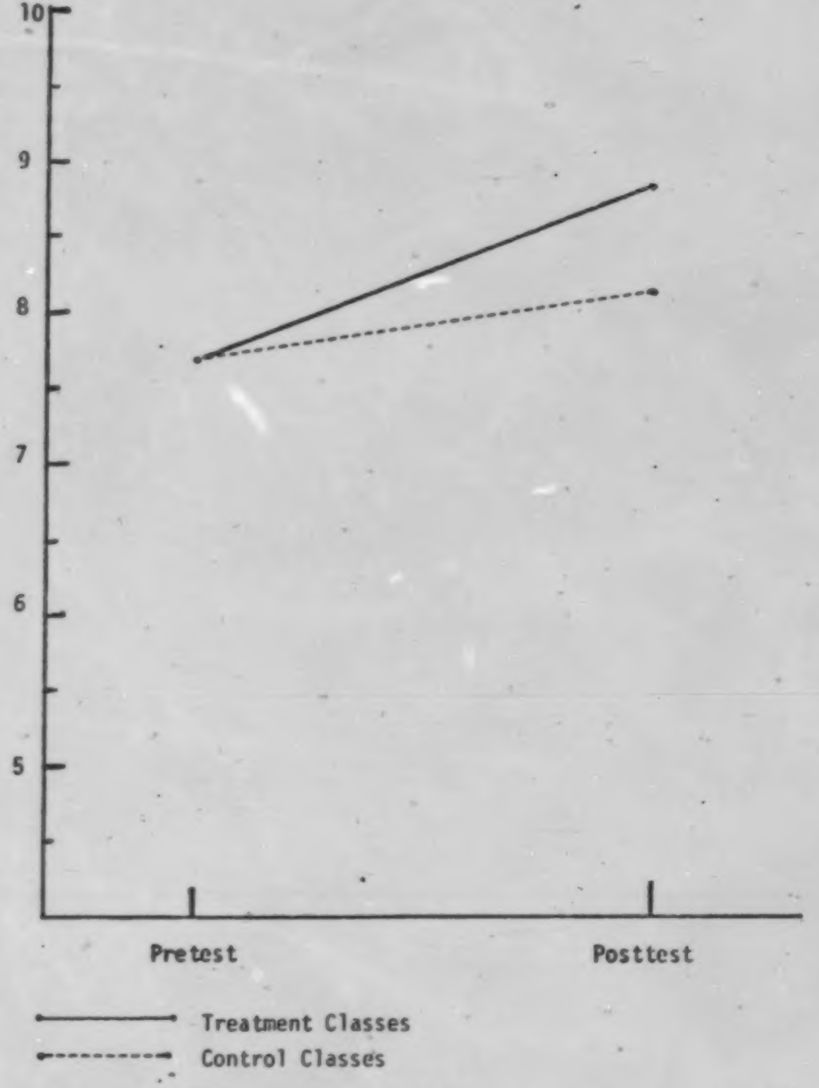
Students were asked to relate photographs of surfaces of textures to natural objects. Figure 1 represents a graph comparing treatment and control group responses on which treatment students gained more than control group students in their ability to relate textures (See p.29, Pilot Report.)

In a post-package orally administered questionnaire, students indicated satisfaction with the package, 78% saying they learned "a lot" and 66% indicating a very high or highly positive attitude toward the package (see Appendix, Pilot Report). Similarly, teachers responded positively to the package on a post-package questionnaire, all of them responding that they had no problems with the package and indicating that the children enjoyed it (see pp. 66-70, Pilot Report).

Figure 1

Test One

TEXTURE TACTUAL VISUAL



NOTE: Each Treatment data point represents the mean of 4 class means.
Each Control data point represents the mean of 4 class means.

from "Pilot Report: Texture" (June, 1971) page 29.

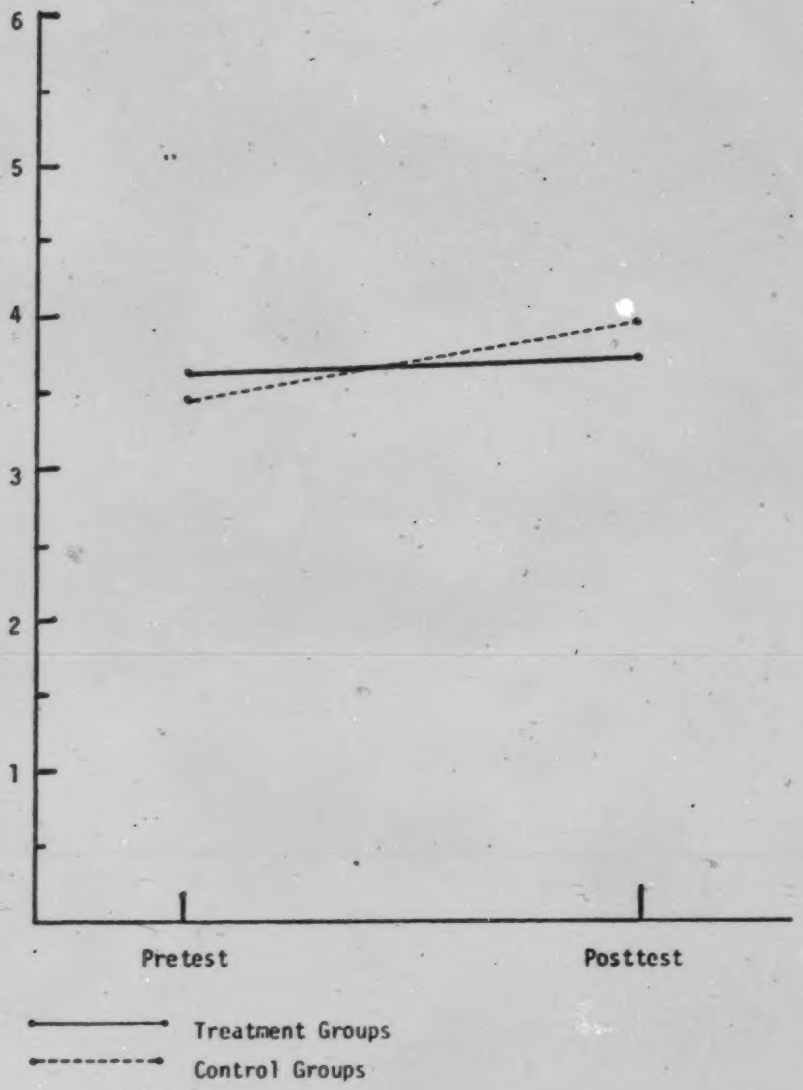


Figure 2

Test Two

TEXTURE TACTUAL VISUAL

NOTE: Each Treatment data point represents the mean of 4 group means. Each Control data point represents the mean of 4 group means. (Each group is one-half a class.)

NIE PRODUCT: PART AND WHOLE
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory, Inc.)
3120 59th Street
St. Louis, Missouri 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Jerilynn Kupferberg, Product Developer

NARRATIVE DESCRIPTION

The Aesthetics and Arts Elements series of the Five Sense Store packages includes this set of materials which is designed to introduce kindergarten and first-grade students to part and whole as a pervasive relationship in their lives and environment and especially in people-created works of art. Working with their text, Part and Whole, and puzzles, photographs, and story cards, students find that a whole is made up of parts. Then they see that some wholes are also parts and some parts are also wholes. Finally, they explore the concept that introducing different parts into a whole can create a new whole or can give them a different feeling. Part and Whole is fundamental to the other packages in the Aesthetics and Arts Elements series. It presents the abstract organizing principle upon which the others are based. Thus, after working through this package, students can understand more easily how elements of natural occurrences or art works contribute to a pleasurable experience with the whole.

Sample Lesson
(Addressed to Teachers)

Lesson 3: Parts and Wholes in Pictures

General Description: The students each draw a picture of something their family does together. They examine their own drawings and learn that they use some of the same parts (elements) when they draw a picture that artists use when they create an art work. Through arranging shapes, lines, etc., from a painting included in their Part and Whole books, the students see that people use certain elements to create a whole idea in an art work whether the idea expressed is realistic or abstract.

Procedure: Ask the students to draw a picture about something their family does together. Discuss with them what kinds of things these might be (sharing meals, taking a trip, watching TV, etc.).

After they have completed their pictures, ask the students specific questions:

> "What parts did you use to draw the people and things in your picture?" (Shapes, lines, colors, etc.)

This is the most important part of the activity.

Compare the students' pictures to the three paintings on pages 22 and 23 of their Part and Whole book:

> "Did you use the same parts in your pictures that the artist used in his?" (Yes. They used shapes for the people and things and color and lines for the grass, etc.)

You may want to do this in small groups by having the students put up their pictures and talk about all of them.

SUBJECT AREA(S)

Aesthetics and Arts Elements: Visual Art/Music/Sensory Development

A whole is made up of parts; a part of a whole can in itself be a whole; the whole (work of art) may change by rearranging or changing the nature of individual parts.

INTENDED USERS AND BENEFICIARIES

Part and Whole was designed for and formally tested with kindergarten and first-grade students.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package is to 1) develop students' ability to respond to the parts and the organization of parts in perceiving a whole work of art; 2) develop perception of how parts function together in determining the whole; and 3) develop awareness of the artist's behavior in selecting and arranging parts to create whole works of art.

PATTERNS OF USE

Part and Whole is a self-contained unit of instruction with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in art, music, drama, or dance; linked with other AEP packages which are related to art, music, drama, dance, and literature and which are clustered around "Aesthetics and Arts Elements ; used with sensory development curricula; or used with language development programs.

ASSESSMENT PROVISIONS

Informal provisions are made for assessment of student learning in the package. Informal guidelines for assessment are built into the Teacher's Guide.

TIME REQUIREMENTS

Part and Whole takes approximately ten hours to complete. The lessons can be done in 18 class sessions of about 30 minutes each.

IMPLEMENTATION PROCEDURES

Part and Whole does not require a specialist teacher. It is recommended that the students work in pairs and that they be seated on the floor when using the study cards and doing some of the other activities. The Teacher's Guide carefully outlines all procedures and has been rated as quite useful in field trials.

The package encourages the teacher to help students focus on parts and wholes in their environment and in works of art.

Part and Whole is not yet in final form. We cannot, therefore, make an accurate statement about the durability of the materials.

MATERIALS, EQUIPMENT, AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student Materials:				
3 Face puzzles	1 set per 6 students	*		
3 Mime puzzles: "Art Parts"				
3 Sets of photographs				
3 Sets of storycards				
Part and Whole study cards				
3 Part and Whole books				

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Teacher Materials:				
Filmstrip Presentation		*		
Teacher's Guide				

*Materials still in prototype stage; cost not yet determined.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in five separate classrooms of varying ethnic and socio-economic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information about the utilization of the published version of the package on a yearly basis.

The pilot evaluation of this package was carried out with grades K and one students in local schools, Specially constructed tests indicate that students who received package instruction were more able to perceive parts of works of art in relation to the whole work than students who were not taught the package, to a moderate degree. Students who received package instruction also evidenced a greater gain in figure-ground perception than students who were not taught the package. Student and teacher satisfaction with the package was high as measured by post-treatment questionnaires and interviews.

AVAILABILITY

Part and Whole is copyrighted and will be completed by November, 1975.

INFORMATION CURRENT AS OF MARCH 1975

Evidence to Support Assurances and Claims for Part and Whole

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1972). This source explains the standard procedures followed in the development and evaluation of this product. A Plan for the Hothouse Testing of Aesthetic Education Program Packages (Hall and Thuernau, 1974) explains this phase of evaluation in greater detail. As employed by the Aesthetic Education Program, hothouse evaluation consists of intensive observation of package activities in a single classroom trial. A Plan for the Pilot Testing of Aesthetic Education Program Packages (LeBlanc, 1974) explains the pilot test phase of evaluation in greater detail. As employed by the Aesthetic Education Program, pilot evaluation consists of trial of the materials in three classroom settings of varying ethnic and socio-economic characteristics.

Effectiveness:

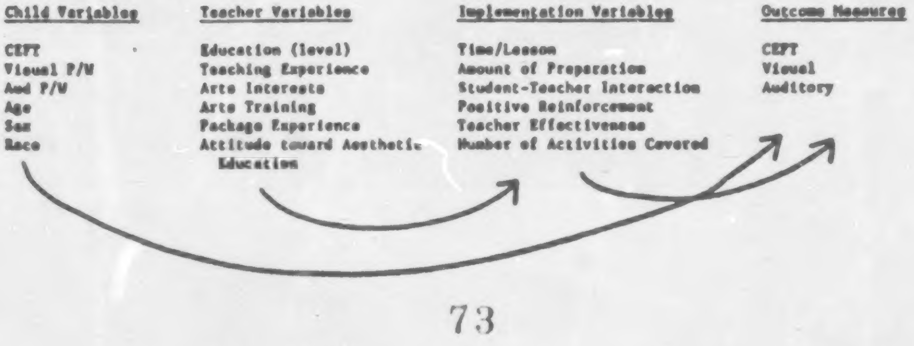
This evaluation design encompasses more than a simple pre-test/post-test control group design. Such a design which lacks estimation of differences in package implementation would place the results or lack of results of the students within the total treatment component. This design, however, attempts to determine variables which affect student outcome scores on specific instruments. Implementation variables such as teacher preparedness, correct following of procedures, etc., are measured through the use of weekly unannounced spot observations by a trainer observer using systematic observation and recording technique. In addition teacher characteristics such as arts experience, years teaching, etc. are gathered.

The effects of all implementation variances, pre-test variables, and teacher variables on student outcome scores using analysis of covariance are reported in the Pilot Report section entitled Instrumentation.

The following chart illustrates the evaluation design.

PART AND WHOLE

The Evaluation Model and Its Implications and the Effects of Various Components on Other Components



Child Variables	Teacher Variables	Implementation Variables	Outcome Measures
CEFT	Education (level)	Time/Lesson	CEFT
Visual P/W	Teaching Experience	Amount of Preparation	Visual
Aud P/W	Arts Interests	Student-Teacher Interaction	Auditory
Age	Arts Training	Positive Reinforcement	
Sex	Package Experience	Teacher Effectiveness	
Race	Attitude toward Aesthetic Education	Number of Activities Covered	

The Instruments:

Kindergarten and first-grade students from a variety of socio-economic levels were tested using three instruments (full details to be found in the Pilot Report). Instrumentation (in the Pilot Report) by Stephan A. Karp and Norma Konstadt is an individually administered standardized test for children age 5-12. It has been used to assess field dependence in developmental studies of psychological differentiation. The test series contains 25 items, preceded by 13 practice items, all of which are attractive and interesting to most young children.

The children also were tested using a package-specific instrument developed in-house called The Visual Part/Whole Test. This instrument is designed to measure the child's ability to correctly identify a part extracted from the whole picture. It is individually administered and consists of five subscores: proportion, color, pattern, shape, and part/whole. The children view an original art work and on an answer-sheet circle the correct parts from five alternatives. The incorrect alternatives are held constant on all but one of the four dimensions. Thus, when a child incorrectly identifies a part, it can be determined if the incorrect choices follow any particular pattern.

The third instrument used to test the effects of the Part and Whole was a package-specific instrument developed in-house entitled the Auditory Part/Whole Test. This instrument is designed to measure the child's ability to recognize sounds as parts of whole sounds. The test is group administered. The children listen to tape recorded sound collages and respond by identifying visual indicators of the component parts of the sound.

Students are given a fluency score, which reflects their success in identifying the correct number of parts in a sound collage. This score is corrected for guessing. Students also receive a correctness score, based upon correct identification of each part within a sound collage.

Content Reviews by Outside Consultants:

The package content was reviewed for quality and appropriateness by specialists in child development and early childhood education.

Teacher Reactions to the Program:

All teachers were interviewed in depth for the purpose of evaluating the materials.

Discussion of Results:

Results and analysis of the three instruments and the effects of teacher, student, and implementation variables are shown in the Instrumentation section of the Pilot Report available April 1, 1975.

After adjusting the students' outcome scores for pre-test effects, differences in age, race, or sex, it was found that on all instruments the classes undergoing high implementation of the materials scored significantly higher than their controls. These differences were significant at the .05 level. The groups undergoing low implementation of the materials did not score significantly higher than their untreated counterparts. In addition, both reviews suggested the package objectives and content are sound and with minor revisions was ready for publication. All teachers favorably reviewed the materials and would recommend them to other teachers. These results are found in the Pilot Report.

These pilot trial results show the Part and Whole package to be successful in improving children's figure-ground perception as well as visual and aural discrimination skills. This success increases with the quality of implementation.

NIE PRODUCT: TONE COLOR
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional
Educational Laboratory, Inc.)
3120 59th Street
St. Louis, Missouri 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Edward Sweda, Product Developer

NARRATIVE DESCRIPTION

The second group of Five Sense Store materials, Aesthetics and Arts Elements, includes this package which helps students sharpen their perception of one quality of sound, tone color. A filmstrip introduces the idea of parts and wholes in many things--an egg, a building, a musical selection. This idea is amplified in a sound, color film that shows and graphically points out the parts heard in a performance of a song called "Give a Million Cheers for Me." The students then listen to recorded musical selections, ranging from a drum pattern to Brubeck's "Take Five," and indicate the tone colors they hear with illustrated cards and a game board.

This package will encourage students: 1) to become aware of parts and wholes in the arts and in the environment; 2) to come to an awareness of a musical whole being made up of smaller, distinct parts; and 3) to hear and recognize specific tone colors.

Sample Lesson
(Addressed to Teachers)

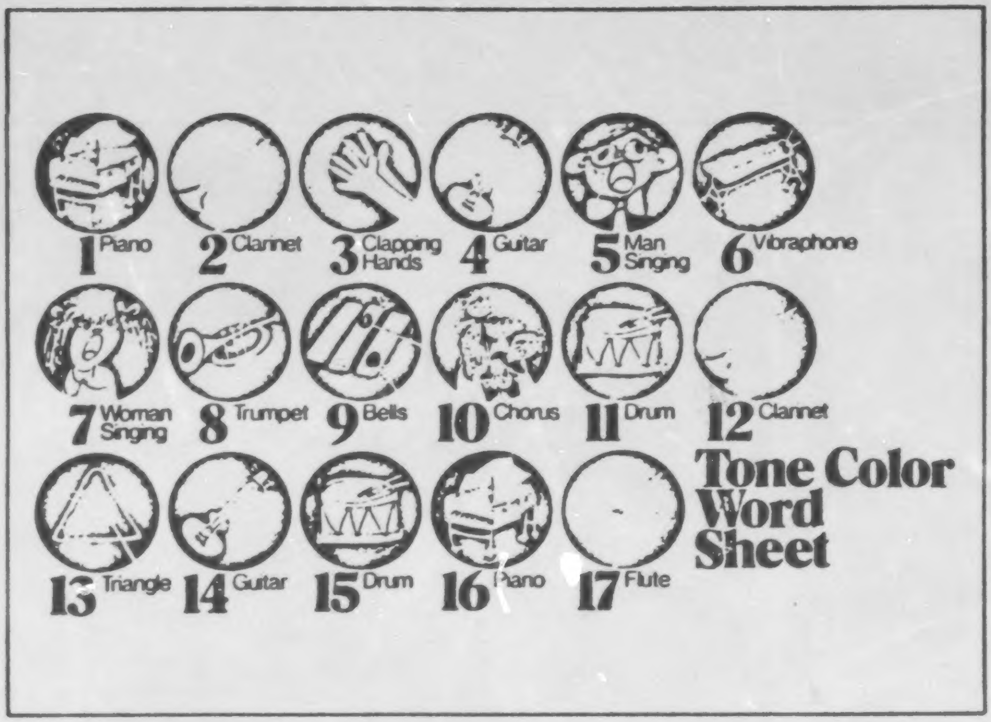
Activity 3: Identifying Tone Colors

General Description: In this activity, the students will listen for tone colors on the records and will identify them by picture, by name, or by a number on their tone color word sheets.

Classroom Management: Before using the record with your students, listen to the explanation and the first few selections for Activity 3. A period of 30 minutes should be enough to complete the activity with the students, but feel free to repeat selections and discuss responses.

Sequence of tone colors on record

Woman Singing
Bells
Piano
Flute
Chorus
Triangle
Clarinet
Guitar
Clapping Hands
Vibraphone
Trumpet
Drum
Man Singing


1 Piano
2 Clarinet
3 Clapping Hands
4 Guitar
5 Man Singing
6 Vibraphone
7 Woman Singing
8 Trumpet
9 Bells
10 Chorus
11 Drum
12 Clarinet
13 Triangle
14 Guitar
15 Drum
16 Piano
17 Flute
Tone Color Word Sheet

First, explain the term "tone color" to the students: tone color: the characteristic sound of an individual instrument or of a particular voice. Also known as timbre. The tone color of a sound permits the listener to distinguish between the sounds made by a guitar and a banjo, or between a violin and a clarinet.

When you are sure that your students are familiar with the meaning of the word "tone color," move on to the record and tone color word sheet portion of the activity. The answers to each selection on the record are given at the beginning of the next recorded band and are also noted below.

The students can identify the tone colors by the red numbers on their tone color word sheets, by the name, or by pointing to the illustration.

SUBJECT AREA(S)

Aesthetics and Arts Elements: Music

Introduction of the term "tone color"; concept of part and whole; recognition of tone color as an important, aurally distinguishable part of a musical selection; familiarity with names and pictures of instruments that produce certain tone colors.

INTENDED USERS AND BENEFICIARIES

Although formally tested with children at the first-grade level, Tone Color has been used in pre-school and fifth grade, as well as all the grades between the two.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package is to help students focus on tone color so that 1) they can come to an understanding of how the parts of a whole sound combination fit together, and so that 2) they can begin to judge and value the range of sounds and music around them.

PATTERNS OF USE

Tone Color is a self-contained unit of instruction with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in music; linked with other music-based units developed by the Aesthetic Education Program to create a curriculum; linked with other AEP packages which are related to art, dance, theatre, and literature and which are clustered around "Aesthetics and Arts Element" or used with basic sensory development programs.

ASSESSMENT PROVISIONS

Learning is assessed by both teacher and students. Provisions for assessment are built into the Teacher's Guide, and the final activity of the package focuses upon application and evaluation. Response sheets and recorded musical examples are provided along with advice to the teacher for interpreting assessment results.

TIME REQUIREMENTS

Tone Color takes from 5 to 9 hours to complete, depending on the amount of discussion the teacher encourages and whether or not he or she repeats parts of activities. The activities require a minimum of one half hour each.

IMPLEMENTATION PROCEDURES

Tone Color does not require a specialist teacher. It may be taught in small groups or large groups, depending on the teacher's wishes. The Teacher's Guide outlines all procedures clearly and has been rated as quite useful in field trials.

The teacher is encouraged to challenge students to apply the part and whole concept to other things they perceive and to sharpen the approach to listening they have learned by applying it to new music and sounds that they hear.

Field reports indicate that the materials are durable. Consumables are minimal and are easily purchased from the publisher.

MATERIALS, EQUIPMENT AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost per Item	Replacement Rate	Source if Different from Distributor
Student Materials:				
6 How Many? word sheets	1 set per 6 students	$37.50*	Response sheets consumable yearly or after 5 implementations with a total of 30 students	
6 sets of tone color cards (26 in each set)				
Teacher Materials:				
Teacher Guide (24 pp)		$80.00*		
16mm sound color film				
Color filmstrip				
Record album with 2 12" LP disc records				

*Price subject to change

Summary Cost Information

Tone Color can be purchased in sets of varying multiples of six, e.g., 12-student, 18-student, 24-student sets. Student materials and teacher materials can be purchased separately so that only one teacher set need be purchased with two, three, four or five student sets. Cost for one complete unit containing enough materials for one teacher and six students is $117.50.

Personnel Required for Product Adoption and Implementation

The classroom teacher without special training in music can implement this instructional package. Workshops are offered by the publisher and by CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socio-economic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information on utilization of the published version of the package.

The prepublication evaluation of this unit was carried out with first grade students in local schools. Students responded favorably to the set of materials during classroom trials as evidenced by their responses on a questionnaire. Teachers who used the materials were generally favorable, as indicated by their responses to a questionnaire at the conclusion of the pilot trial.

AVAILABILITY

Tone Color is currently available from the publisher. Product carries a 1973 copyright date, and copyright is claimed until 1981.

The Viking Press/Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

INFORMATION CURRENT AS OF JANUARY 1975

Evidence to Support the Assurances and Claims for *Tone Color*

Careful Development:

Assurances and claims of careful development are supported by the *Basic Program Plan, Aesthetic Education Program* (CEMREL, 1969, 1972). This source explains in detail the standard procedures followed in the development and evaluation of this product. A hothouse evaluation report was prepared for this package, and describes the results of intensive observation of package activities in a single classroom trial. A pilot evaluation report shows the results of package trial in three different classroom settings. Both hothouse and pilot evaluation reports are available from CEMREL. *An Overview of Development and Evaluation of Five Sense Store* (Edwards, 1974) explains the procedure through which the program continues to gather information on products which have passed through the pilot stage of evaluation.

Student Satisfaction:

A student questionnaire was administered to three classes during the pilot level trial and evaluation. The questionnaire revealed a favorable response to the package, and indicated that students felt they understood how to use the instructional materials. Table 7 of the Pilot Report presents a frequency tabulation of responses to the student questionnaire, while Appendix B of the Pilot Report shows a sample of the questionnaire and its directions for administration.

Approximately 90 percent of the students indicated that they were either happy or very happy with the package. Almost 50 percent indicated that they would have liked to have spent more class time with the materials. The great majority of students felt they understood how to use the materials.

Teacher Satisfaction:

At the conclusion of pilot trial, the teachers who had used the materials responded to a questionnaire. This questionnaire and the teacher responses are reproduced as Appendix C of the pilot report. Responses were generally favorable. All teachers indicated they would recommend the package to other teachers after modifications had been made.

NIE PRODUCT: DRAMATIC CONFLICT
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional
Educational Laboratory, Inc.)
3120 59th Street
St. Louis, Missouri 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Sharon Bocklage, Editorial Coordinator
Bernard S. Rosenblatt, Associate Director and
Product Developer

NARRATIVE DESCRIPTION

One of the aesthetic elements of theatre is dramatic structure. The ability to perceive any portion of this structure increases the students' sensitivity as a spectator. One Aesthetic Education Program package, Constructing Dramatic Plot, enables students to explore major elements of structuring a plot: character, setting, incident, conflict, crisis, and resolution. Another package, Creating Characterization, focuses on physical and vocal expression of emotions as major structural elements of drama.

This package, Dramatic Conflict, one of the Aesthetics and Arts Elements series of Five Sense Store packages, emphasizes one pivotal element in dramatic structure--conflict. Dramatic conflict is the interaction between a character and some force which is a potential obstacle to the character's achieving what he wants and/or needs. The major concern of these lessons is that students perceive how conflict formation takes place. They will demonstrate this perception through the sorting of cards, discussion, story telling, and improvisation.

Sample Lesson
(Addressed to Teachers)

Lesson 13: Creating a Simple Story with a Conflict

In this activity students will work in pairs. They will use the Card Deck and the Conflict Story Board to make up a simple story with a conflict.

One student should select a Character Card and a Goal Card. Place the cards in holders and the appropriate space on the Board. The second student should choose a card that could cause a conflict and place that card in a holder. Each pair of students will work together to make up a story with a conflict. The first student starts making up and telling a story as he slowly moves along the "story line" toward the goal. At some point in the story the second student enters the story line to create the conflict, i.e., tries to stop the first character from getting his goal. The students must decide if the first character can get by the conflict and achieve his goal or whether he is prevented from achieving his goal. Thus the students continue until their story is completed.

During this time you can circulate among the students to see if they are utilizing the elements appropriately. If an impasse occurs in solving the conflict perhaps you can help the students out of their dilemma by asking leading questions.

Once the students are satisfied with their stories you can lead a "tour through Story Land." The "tour" can be conducted by leading the whole class from Story Board to Story Board. As the "tour" stops at each Board the appropriate students move their cards and tell the "tour group" their story. After the "tour" is completed you can discuss all the different conflicts that were presented with the stories were told.

The amount of time necessary for this activity should be decided by the teacher, depending upon the interest of her students.

SUBJECT AREA(S)

Aesthetics and Arts Elements: Theatre Arts

Introduction of the terms "conflict," "goal," and "character"; interrelation of these three elements in a dramatic structure; creation of stories which contain these elements.

INTENDED USERS AND BENEFICIARIES

Dramatic Conflict was designed for use by students in the first grade. It can be used successfully with second and third-grade students as well.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package is for students to be able 1) to identify, 2) to describe, and 3) to manipulate major elements of dramatic conflict formation.

PATTERNS OF USE

Dramatic Conflict is a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in drama; linked with other theatre-based packages developed by the Aesthetic Education Program to create a curriculum; or linked with AEP packages which are related to music, art, dance, and literature and which are clustered around "Aesthetics and Arts Elements."

ASSESSMENT PROVISIONS

While there are no formal tests, teachers and students evaluate learning through analysis of student oral response and student activities. Guidelines for assessment are in the Teacher's Guide.

TIME REQUIREMENTS

The lessons in Dramatic Conflict require approximately 10 hours to complete.

IMPLEMENTATION PROCEDURES

Dramatic Conflict does not require a specialist teacher. The package is designed as a whole class activity with students working individually and in pairs. When working individually, the student may work at his desk. When students work in pairs, they will need more room to spread out their materials and do their improvisations. The Teacher's Guide outlines all procedures.

The materials in Dramatic Conflict are now in the final pre-publication stage, and their durability is being based on information received from testing situations. Consumables will be minimal and easily purchased from the publisher.

MATERIALS, EQUIPMENT, AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student Materials:				
Character boards				
Goal boards	*	*		
Conflict story boards				
Card decks				
Teacher Materials:				
Filmstrip				
Card deck	*			
Teacher's Guide				

*These materials are still in the prototype stage. Packaging and cost determinations have not been made.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training in drama can implement this instructional package. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socio-economic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eleminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The major claim to be made about the Aesthetic Education Program's Instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information about the utilization of the published version of the packages on a yearly basis.

Students from a variety of socio-economic levels who were taught the pilot version of the package scored significantly higher on a test which asked them to identify the major concepts of the package (goal, main character, source of conflict) than did untreated students. Student and teacher satisfaction were high as indicated by post package questionnaires.

AVAILABILITY

Dramatic Conflict is copyrighted and is scheduled for publication late in 1975. More detailed information can be obtained closer to the publication date from the publisher/distributor:

The Viking Press/Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

INFORMATION CURRENT AS OF MARCH 1975

Evidence to Support Assurances and Claims for Dramatic Conflict

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1972). This source explains in detail the standard procedures followed in the development and evaluation of this product. A hothouse evaluation report was prepared for this package, and describes the results of intensive observation of package activities in a single classroom trial. A pilot evaluation report shows the results of package trial in three different classroom settings. Both hothouse and pilot evaluation reports were prepared for Dramatic Conflict.

Effectiveness:

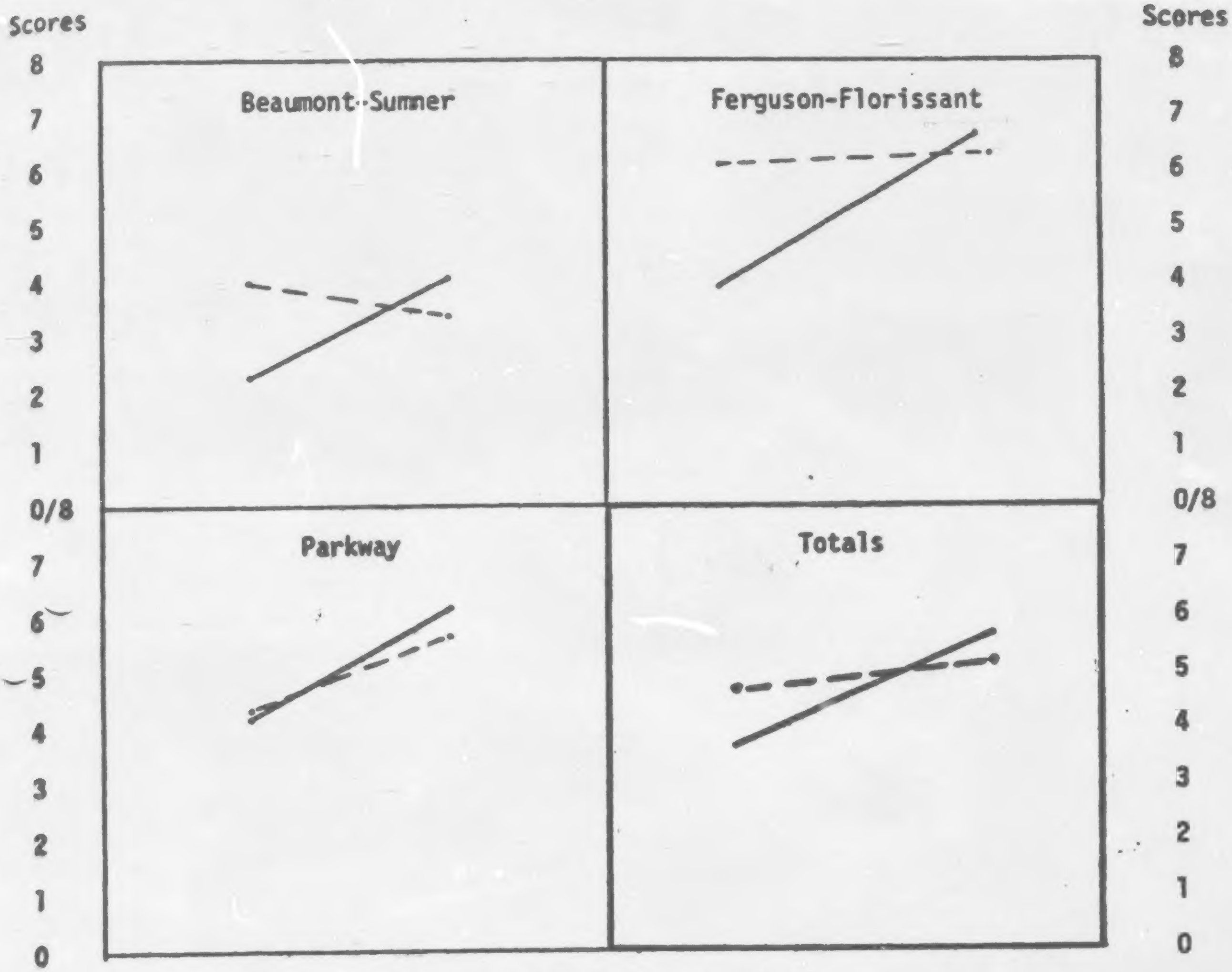
Cognitive learning: Students who received package instruction were better able to identify the major concepts of the package than were untreated students. The students were asked to identify the goals, main characters, sources of conflict in a series of picture stories (see Appendix to Pilot Report).

Teacher satisfaction was indicated in responses to a questionnaire administered after the package. Teachers felt students were excited about or looked forward to each lesson and that the Teacher's Guide explained how the content was related to aesthetic education and gave them the criteria for assessing student learning. (See Pilot Report.)

Student satisfaction was in the results of an orally administered questionnaire. In 71% of the students using the materials attitude was high, or very high, and 71% felt they learned a lot. The results are tabulated in Table 2 of the Pilot Report.

Figure 1

Comparison of Treatment and Control Mean Pre- and Posttest Scores



Left Position = Pretest; Right Position = Posttest

Solid Line = Treatments; Dotted Line = Controls

from "Pilot Report: Dramatic Conflict" (May 1972), page 36.

NIE PRODUCT: RHYTHM/METER
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory, Inc.)
3120 59th Street
St. Louis, Missouri 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Dale Hamilton, Product Developer

NARRATIVE DESCRIPTION

The second group of primary packages, Aesthetics and Arts Elements, includes this title, through which students become familiar with rhythm and meter in music and in other arts areas and the environment. A set of activity cards structures experiences with rhythm in visual pattern, in sounds, and in movement. A teacher's guide and a two-record set of musical selections are tools for investigating meter in music--the students listen and identify meters. The selections, ranging from classical and electronic music to folk songs, are supported by charts, recording sheets, and a series of post-tests.

The Meter portion of the package focuses the students' attention on one element of musical composition, meter, and its relationship to a whole musical composition. After participating in the nine Meter lessons explained in the Teacher's Guide, the students will know that meter is an important element in the composition of music. The goal of the three groups of Rhythm/Meter activity cards is to help the students extend the concepts in the Meter materials to other areas in their environment: they will experience pulse or beat in movement, discover and create visual patterns, and find rhythm in sounds and language.

Through the Rhythm/Meter activities, the students will find that rhythm is order in the movement all around them. The students can observe rhythm in the basic cycles and movements of their bodies, in patterns they see every day, in sounds they hear. For example, they can feel a steady swing to their arms as they walk; they can observe the regularity of evenly-spaced lampposts on a city street or of bricks in a house; they can notice the sounds of heavy traffic pausing for a red traffic light and flowing at the green light. They see that rhythm is everywhere and that it is both natural and people-created.

Sample Lesson
(Addressed to Teachers)

Rhythm in Visual Pattern
New Patterns in Animals

Concept: Patterns help people identify objects, and objects take on a new appearance when the pattern is changed.

Objective: The students will know what a pattern is and recognize patterns in their environment. They will also be aware that if the pattern of something is changed, that thing will take on a new appearance.

Procedure: Review the nature of pattern with the students. Have the students investigate the classroom and their own clothes to find examples of patterns. Then ask them to name all the animals they can think of that have patterns (turtle, zebra, snake, leopard, etc.). Point out to the students that they know these animals partly by their patterns.

Next, have the students use crayons to draw simple outlines without details of their favorite animal in the zoo on the construction or butcher paper. Have them cut these out and lay them on the patterned side of the wallpaper or wrapping paper. (If they use the wrong side of the paper, the patterned animal will be backward for the next step of this activity.) Ask them to outline their animal. Then have them cut out the patterned-paper animal and paste it to the original. The animal suddenly has a new pattern!

Display the patterns in such a way as to create the feeling of a jungle or a zoo without bars. The students may want to add exotic trees, and so forth, for effect. Discuss with them how the new patterns give a new image to the animals.

SUBJECT AREAS

Aesthetics and Arts Elements: Music, Visual Art, Dance

Meter and its relationship to a whole musical composition; occurrence of visual pattern in the environment; order, shape similarity, and repetition as elements of visual pattern; rhythm as order in movement; interrelationship of rhythm in sound and movement; pattern formed by rhythm in sounds.

INTENDED USERS AND BENEFICIARIES

Rhythm/Meter was designed for and tested with second, third, and fourth-grade students.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package is for students 1) to know that meter is an important element in the composition of music; 2) to recognize and execute simple meters; 3) to learn some basic musical terms 4) to extend the concept of meter in music to other areas in their environment--visual pattern, movement, and sound.

PATTERNS OF USE

Rhythm/Meter is a self-contained instructional package. It may be used as part of an ongoing curriculum in music, dance, or visual art, or linked with other AEP units which are related to music, dance, visual art, drama, and literature and which are clustered around "Aesthetics and Arts Elements."

ASSESSMENT PROVISIONS

Three student response sheets are employed as an integral part of the meter lessons. Four tests are included with the materials and are suggested for pretest/posttest or postest only use. Throughout the activities, student learning is assessed by both teacher and students. Appropriate guidelines for assessment are built into the Teacher's Guide.

TIME REQUIREMENTS

Rhythm/Meter takes approximately 12 hours to complete. The Meter portion of the package requires about 3 hours and the Rhythm activities take from 6 to 9 hours, depending upon how many the teacher chooses to do.

IMPLEMENTATION PROCEDURES

Rhythm/Meter does not require a specialist teacher. It can be taught in large or small groups. A large, clear space is needed for the movement activities and some of the sound activities.

Field reports indicate that the materials stand up well with repeated use. Consumables are minimal and can be easily purchased from the publisher.

MATERIALS, EQUIPMENT AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student Materials:				
6 pads of response sheets (30 in each pad)		$15.00*	Response sheets and answer sheets consumable yearly	
8 pads of answer sheets (30 in each pad)				
Teacher Materials:				
Teacher Guide				
Record album with 2 12" LP disc records		$60.00*		
Set of 3 double-faced wall charts				
Set of 28 rhythm activity cards				

*Prices subject to change

Packages can be purchased in sets of varying multiples of six, e.g., 12-student, 18-student, 24-student, or 30-student sets. Student materials and teacher materials can be purchased separately so that only one set of teacher materials need be purchased with two, three, four, or five student sets. The cost for one six-student set and one teacher's set of materials is $75.00.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher and curriculum consultation is available from CEMREL. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socio-economic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcoming in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information on the utilization of the published version of the packages on a yearly basis.

The pre-publication evaluation of this package was carried out with second and third grade students in local schools. Six tests were constructed for the evaluation of this package, focusing upon the more important outcomes of package instruction. The tests were administered in the classrooms which participated in pilot trial and in an equal number of control group classrooms. When students who had taken the full unit were compared with control group students, those instructed with the unit earned higher scores on each of the six tests. In each of the six tests, the score differences in favor of students who used the materials were statistically significant. Student performance on these tests supports a claim for product effectiveness. The product cultivates in students a heightened awareness of meter as one element of musical composition, and it extends this awareness to the concept of rhythm in sound, [illegible] pattern, and movement.

AVAILABILITY

Rhythm/Meter was copyrighted in 1973 and copyright is claimed until 1981. It is currently available from the publisher/distributor:

The Viking Press/Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

INFORMATION CURRENT AS OF MARCH 1975

Evidence to Support Assurances and Claims for Rhythm/Meter

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1972). This source explains the standard procedures followed in the development and evaluation of this product. A Plan for the Hothouse Testing of Aesthetic Education Program Packages (Hall and Thuernau, 1974) explains this phase of evaluation in greater detail. As employed by the Aesthetic Education Program, hothouse evaluation consists of intensive observation of package activities in a single classroom trial. A Plan for the Pilot Testing of Aesthetic Education Program Packages (LeBlanc, 1974) explains the pilot test phase of evaluation in greater detail. As employed by the Aesthetic Education Program, pilot evaluation consists of trial of the materials in three classroom settings of varying ethnic and socio-economic characteristics. Instrumentation tailored to the measurement of package objectives is developed and utilized in an experimental or quasi-experimental design with treated and control group classes. An Overview of Development and Evaluation of the Five Sense Store (Edwards, 1974) explains the procedure through which the program continues to gather information on products which have passed the pilot stage of evaluation. Both hothouse and pilot evaluation reports were prepared on Rhythm/Meter.

Effectiveness:

Six instruments of measurement were developed specifically for the evaluation of Rhythm/Meter. These instruments are described in summary form below:

1. Aural/Visual Rhythm Profile

The Aural/Visual Rhythm Profile was a composite test, which included the following tasks or subtests:

Sound Rhythm Discrimination Task

Given: two sound stimuli, one somewhat like a drone and one having distinctive rhythm

Task: discriminate between the two stimuli, indicating on the answer sheet which sound has more rhythm

Sound Rhythm Comparison Task

Given: two sound stimuli having the same or different rhythm

Task: compare the two stimuli, and classify them as "same" or "different" on a multiple-choice answer sheet

Sound/Visual Pattern Commonality Perception Task

Given: a sound stimulus and two or more visual patterns, with one pattern indicating the same rhythm as the sound

Task: create symbols and translate the sound rhythm to a visual rhythm or pattern

Visual Pattern Discrimination Task

Given: two or more visual stimuli, one of which is a pattern

Task: discriminate between/among the stimuli, recognizing and circling the one which is a pattern

Usage of Aural/Visual Rhythm Profile: posttest only, treatment and control

2. Imbedded Meter Tests

The imbedded Meter Tests were an integral part of the original Meter package. Each test is summarized below:

Test A

Given: recorded musical examples and a multiple-choice answer sheet showing duple and triple meter patterns

Task: differentiate between duple and triple meter

Test B

Given: questions about musical terms related to meter on a multiple-choice answer sheet

Task: identify correct alternative

Test C

Given: beat marks on an answer sheet

Task: supply bar lines and/or accent marks to illustrate duple or triple meter

Given: beat marks and bar lines

Task: recognize the correct number of measures indicated by the bar lines from multiple-choice options presented

Test D

Given: beat marks, accent marks, and bar lines on an answer sheet

Task: identify the meter as duple, triple, or neither

Usage of imbedded Meter Tests: posttest only, treatment only

3. Rhythm Commonality Perception Task

Given: a movement, a sound, and a visual pattern, each sharing the same characteristic rhythm and presented three times

Task: perceive that the same rhythm is the common element among the three stimuli

Usage: posttest only, treatment and control

4. Creative Pattern Drawing Task

Given: crayons and drawing paper

Task: draw a city street showing as many patterns as you could expect to see in a city street

Usage: posttest only, treatment and control

5. Rhythmic Movement Assessment Activities

Given: silence and a visual signal to begin

Task: initiate and maintain a steady beat

Given: a steady metronome beat for 15 seconds

Task: move your body to the beat and maintain the beat for 45 seconds after the metronome is turned off

Given: a steady metronome beat for 15 seconds

Task: listen to the beat for 15 seconds, retain it silently for 15 seconds, then clap the beat for 30 seconds

Usage of Rhythmic Movement Assessment Activities: posttest only, treatment and control

6. Pattern Perception Fluency Task

Given: the home classroom and a four minute response period

Task: taking turns, identify patterns within the classroom

Usage: posttest only, treatment and control

Results and analysis of the Aural/Visual Rhythm Profile are shown in Tables 1 through 5 of the pilot report. Test materials are reproduced in Appendix A of the pilot report. In a two-way analysis of variance, the treatment (package) effect was significant .01 and the school (test site) effect was significant .01. Treated classes scored higher and the high implementation test site scored higher. Results and analysis of the Imbedded Meter Tests are shown in Tables 6 through 11 of the pilot report. Test materials are reproduced in Appendix B of the pilot report. In a one-way analysis of variance, levels of treatment (full package versus half package) were significant .05. In multiple comparisons using the Scheffe method, the class which received high implementation of the full package scored significantly higher (.05 level) than the class receiving treatment with half the package.

Results of the Rhythm Commonality Perception Task are shown in Tables 12 and 13 of the pilot report. Test materials are reproduced in Appendix C of the pilot report. When a fourfold contingency table was tested with the unit normal deviate, the effect of treatment was significant .001.

Results and analysis of the Creative Pattern Drawing Task are shown in Tables 14 and 15 of the pilot report. Test materials are reproduced in Appendices D and E of the pilot report. In a two-way analysis of variance, the effect of treatment was significant .05. There was also a significant (.05) interaction between treatment and school (test site). The test site suspected of low implementation actually scored higher on the task. This site was located in a more urbanized area, and the task of drawing a city street may have been easier for them on this account.

Results of the *Rhythmic Movement Assessment Activities* are shown in Tables 16 through 17 of the pilot report. Test materials are reproduced in Appendix F of the pilot report. When a fourfold contingency table was tested with chi square, the effect of treatment was significant .01.

Results of the *Pattern Perception Fluency Task* are shown in Tables 18 and 19 of the pilot report. Test materials are reproduced in Appendix G of the pilot report. When a fourfold contingency table was tested with the unit deviate, the effect of treatment was significant .001.

Inspection of these test results shows that *Rhythm/Meter* was highly successful in cultivating the perceptual fluency and creativity measured by the cluster of package-specific tests developed for this evaluation. Treatment with the package was statistically significant in the analysis of each instrument.

NIE PRODUCT: SETTING AND ENVIRONMENT
(Part of the Aesthetic Education Program

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional
Educational Laboratory, Inc.)
3120 59th Street
St. Louis, Missouri 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Blythe Rainey Cuyler, Product Developer

NARRATIVE DESCRIPTION

This package, part of the Aesthetics and Arts Elements group of the Five Sense Store, focuses on the interactive nature of man and his environment both natural and man-made. Its intent is to attune students to how setting or environment affects human beings, whether this effect comes from natural surroundings, such as rivers, mountains, forests, or from man-made settings, such as homes, furniture, schools, or the set of a drama.

One purpose of this package is to prepare students to deal with the concept of setting as it is thought of in the theatre. To appreciate theatre aesthetically involves appreciating a number of dramatic elements, one of these being setting. Before dealing with this concept in its special relationship to theatre, young students need to perceive the influence and importance of setting or environment, in their daily lives. *Setting and Environment* is devoted to developing this perception.

Creating and fostering a sensitivity to our environment is of paramount importance in heightening feelings of personal responsibility toward our surroundings. It is a prime intent of this package to contribute toward such sensitivity.

While experiencing the package materials the students actually perform the function of both playwright and scene designer. The students are asked to express their affective reactions to changes made in their immediate environment and are given the opportunity to manipulate elements (physical objects, space, light, color, sound) within a setting to create certain effects and to solve given design problems. The students become aware of how setting influences behavior. The package promotes individual awareness and aesthetic perception and helps students to become responsible for their natural and man-made environments.

Sample Lesson
(Addressed to Teachers)
Lesson 3

Concept: Settings can influence the way a person feels and behaves. By changing the elements within a setting one can create feeling and behavior changes in the people who will be relating to that setting.

Objective: Through a filmstrip the students will perceive a small boy's changes in feeling and behavior due to the manipulation of elements in his setting. They will also see the boy functioning sometimes as doer and sometimes as perceiver.

Procedure: This activity involves showing the filmstrip "Behavior Settings," in which one small boy's behavior changes as he experiences setting changes. During the filmstrip presentation you'll need to allow time for student pantomimes of activities possible in each setting, and time to discuss briefly the boy's behavior in each setting.

Each time you project a setting without the child, have the students, using the setting as stimulus, take turns improvising how they would act in the setting. For each frame first have a child respond verbally to what he would feel like doing in that setting, then ask him to pretend that he is there in that setting and to pantomime his activity. Emphasize nonverbal improvisation.

Keep the improvisations relatively short. Do not expect polished performances; instead, look for a willingness to participate and a freeing of the children's expressive abilities.

Emphasize that there is no right or wrong behavior for any of the settings in the filmstrip. Encourage the children to do what they feel like doing; permit them to work in pairs if they wish to do so.

Before the filmstrip begins explain:

> "Now we will be looking at pictures which show how one small boy's behavior--how he feels, what he does--changes as he experiences different settings. The same room is used in every setting but it is changed each time by adding different objects to it. First you will see each setting and then you will see the boy in the setting."

Begin the filmstrip. The following questions will help you in discussing the young boy's behavior in each setting and in drawing out your students' reactions to each setting.

Frame 1: (a bare room)

Teacher: "How would you feel if you were in this room?"
(happy, lonely, bored)
"What would you do if you were in this room?"

While this frame is still on the screen, ask for someone to pantomime what he or she would do in the room.

Frame 2: (boy standing in corner)

Teacher: "Here is what the boy felt like doing."

(The lesson continues with the rest of the filmstrip.)

SUBJECT AREA(S)

Aesthetics and the Arts Elements: Theatre

Every person stands in relationship to many settings.

Settings are made up of light, sound, color, space, and furniture. When people design settings they manipulate these elements. The planners of settings must also keep in mind the people who'll be functioning in that setting, both the doers (actors or constructors) and the perceivers (audience).

Settings can influence the way a person feels and behaves. By changing the elements within a setting one can create feeling and behavior changes in the people who'll be relating to that setting.

In theatre settings all the elements and behavior are controlled. Theatre settings are artificial settings rather than actual, even though some appear real (true-to-life) and others appear imaginary.

INTENDED USERS AND BENEFICIARIES

Although Setting and Environment was designed for and tested at the second grade level, it may be used with older students as well.

GOAL(S) OR PURPOSE(S)

The goals of this package are to help students: 1) to acquire an understanding of the term "setting"; 2) to learn that setting is made up of the elements of: sound, light, color, space, and furniture;

3) to realize the importance of doers (constructors) and perceivers (audience) in relationship to setting; 4) to observe and experience how setting affects feelings and behavior; and 5) to gain an understanding of theatre settings as artificial settings, in which the elements, feelings and behavior, and doers and perceivers are controlled. This is unlike real settings in which all of the above are not always predictable.

PATTERNS OF USE

Setting and Environment is a self-contained set of materials. It may be used as part of an ongoing curriculum in theatre; linked with other AEP units which are related to theatre and environment; and used in connection with the other packages in the Aesthetics and Arts Elements group.

ASSESSMENT PROVISIONS

While there are no formal tests, learning is assessed by teacher and student. Guidelines for assessing student performance and oral response are built into the package.

TIME REQUIREMENTS

Setting and Environment requires approximately 15 hours to complete, depending on class size and utilization of suggested additional activities. Teachers generally devote one hour per day, for two and a half to three weeks to the materials.

IMPLEMENTATION PROCEDURES

Setting and Environment does not require a specialist teacher. The package has been tested with students in grades two and three, but may be used with older children as well. The activities are designed both for individualized experiences and group experiences, and are to be teacher-led.

Many of the activities will require rearrangement of the classroom and a good deal of movement.

MATERIALS, EQUIPMENT, AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student Materials:				
6 sets of theatrical gels	1 set per student	*		
Teacher Materials:				
1 Sound Library (10 cassettes of sound effects)				
1 Sound filmstrip "Persons and Settings" "Behavior Settings"				
1 Teacher's Guide				

*Cost per item unavailable at this time.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this unit of instruction. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socio-economic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eleminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information about the utilization of the published version of the package on a yearly basis.

The pre-publication evaluation of this package was carried out with second-grade students in local schools. A test was constructed for the evaluation of this package, focusing upon the more important outcomes of package instruction. The test was administered in the classrooms which participated in pilot trial and in an equal number of control group classrooms. When students who had taken the full unit were compared with control group students, those instructed with the unit earned higher scores on the test. The score differences in favor of students who used the materials were statistically significant. Student performance on this test supports a claim for product effectiveness. The product cultivates in students a stimulated imagination with regard to their environment.

AVAILABILITY

The anticipated completion date of Setting and Environment is late in 1975. The package is copyrighted.

INFORMATION CURRENT AS OF MARCH 1975

Evidence to Support the Assurances and Claims for Setting and Environment

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1972). This source explains the standard procedures followed in the development and evaluation of this product. A Plan for the Hothouse Testing of Aesthetic Education Program Packages (Hall and Thuernau, 1974) explains this phase of evaluation in greater detail. As employed by the Aesthetic Education Program, hothouse evaluation consists of intensive observation of package activities in a single classroom trial. A Plan for the Pilot Testing of Aesthetic Education Program Packages (LeBlanc, 1974) explains the pilot test phase of evaluation in greater detail. As employed by the Aesthetic Education Program, pilot evaluation consists of trial of the materials in three classroom settings of varying ethnic and socio-economic characteristics. Instrumentation tailored to the measurement of package objectives is developed and utilized in an experimental or quasi-experimental design with treated and control group classes.

Effectiveness:

Second-grade students from a variety of socio-economic levels were administered a subtest of the Torrance Test of Creative Thinking a standardized measure of creativity of three Torrance subtests was taken by every student. Students were randomly assigned to creativity tests involving (a) product improvement, (b) unusual uses, and (c) consequences.

The subtests were used to assess a general creativity factor intended to pinpoint the effect, if any, of the package's imaginary environment concept exploited in the "What If?" game of Lesson 2. Evaluators hypothesized that high scores on all three Torrance subtests would indicate that the students tested were generally creative, while low scores would indicate a general lack of creativity. It was thought that the package might tend to stimulate general creativity.

Discussion of Results:

In order to establish a basis for comparison with the Torrance Tests of Creative Thinking, approximate criterion scores were calculated for subtests through a process of interpolation from the technical manual.

Although the criterion score established before pilot trial is a rough one, there seems to be evidence that students undergoing treatment perform better than untreated students, given the comparability of the norming group. Children in the pilot sample averaged 26% higher than the extrapolated "norm" supports the claim that children's imaginations are stimulated as a result of using the Setting and Environment materials. (Information available on pp. 28, "Torrance tests of Creative Thinking," Setting and Environment Pilot Report from CEMREL, Inc., October, 1973.)

Teacher Satisfaction:

Teachers who taught a pre-publication version of the package responded to a questionnaire. The results are tabulated on p. 20 of the pilot test report. All teachers surveyed felt that package materials had a positive effect on the student's learning experiences, and that their students looked forward to each lesson. The teachers also noted that the package increased students' ability to describe feeling, greater use of imagination, and an inversion of leadership roles.

NIE PRODUCT: NON-VERBAL COMMUNICATION
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional
Educational Laboratory, Inc.)
3120 59th Street
St. Louis, Missouri 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Blythe Rainey Cuyler, Product Developer

NARRATIVE DESCRIPTION

This set of materials, one of the Aesthetics and Arts Elements series of the Five Sense Store packages, introduces primary students to non-verbal communication both in their immediate environment and in the theatre.

So much of theatre is not conversational, but, rather, action or mood expressed in movement and vocal qualities. This is a theatre package; hence one of the goals of the package is to help students to become more appreciative of how non-verbal communication is used as an element in the total theatrical process. However, unless the students can begin to interpret their immediate environment, including their own use of non-verbal communication, they will not be able to appreciate the subtleties of a theatre experience, either as performers or as audience members.

The instructional materials in this package will expose students to a wide variety of non-verbal communication, help them to decode or understand what is being "said" non-verbally, and give them the opportunity to experiment with encoding or enacting non-verbal communication.

To reach the package's goals, students participate in ten activities involving various stimulus materials. A face board and transparent overlays of eyebrows and mouths in various positions allow students to experiment with these most mobile facial features and to perceive how these features convey emotions. To help them imitate the expressions they create on the face board and to aid in exploring the expressive potential of their own faces, the students use a metal hand mirror. A tape recording activity allows them to tell "emotion stories" explaining the faces they have created on the face boards. A recorded activity song affords them an opportunity to manipulate their faces and bodies expressively. A six-minute film, showing students the use of non-verbal communication in a theatrical setting and contrasting that usage with the daily use of non-verbal communication, extends the concept of non-verbal communication to include posture, movement, body relationship to another, and the expressive ability of hands. Another stimulus material is a recording which asks the students to identify various non-verbal vocal cues. Both student and teacher answer booklet are used in conjunction with the record. The flipbook facilitates the students' ability to look beyond stereotypes in decoding communication from clothing and hand objects carried by a person and to more fully understand the communication potential of costumes. Dressing in costumes collected by the class allows the students the opportunity to manipulate the visual non-verbal communication of clothing and hand properties and to begin to "try-out" various roles suggested by the costumes. Finally, the students are asked to improvise a short skit using the non-verbal cues of costume, facial expressions, body movement and body positioning in relation to another.

Through the use of the materials in this package, not only will students be receiving exposure to basic elements of theatre, but, perhaps more important at this stage in their development, they should begin to become more effective and creative communicators in their daily lives, both as "senders" of messages and as "receivers" of messages.

Sample Lesson
(Addressed to Teachers)

Lesson 3: The Voice in Non-Verbal Communication

Concept: Vocal qualities can communicate emotions, age, and ideas.

Background: Lesson 3 exposes the student to the concept that feelings are communicated by how the message is spoken. The student listens to incongruent verbal and vocal speeches. Verbal and non-verbal codes usually complement each other; however, both children and adults frequently find themselves receiving two messages simultaneously. When the two channels, verbal and vocal, provide conflicting cues, interpersonal understanding depends upon the priorities assigned by the communicator and receiver to the channels. For the child to gain an understanding of the psychological state of an actor or a communicator, formal, rational, verbal communications are often of less value than the nonrational, non-verbal communications.

Following his exposure to incongruent verbal and vocal communication, the child listens to several speeches wherein the verbal content has been treated by an electronic filter making it difficult to understand. The child tries to identify the emotional content of each treated speech. This is possible because feelings are communicated, at least in part, by the form of a spoken message and because there are relatively stereotyped form/feeling correlations.

Another part of the tape exposes the child to the concept that vocal qualities express more than just emotional states. The student listens to an old man speaking and to a young girl and considers how the voice can communicate age. Then the child discovers how vocal qualities can be used to enhance the communicative value of words. The tape asks the student to experiment with his own voice by saying words in such a way that the idea or connotation of words is relayed to the listener via vocal quality.

In the theatre and in our daily lives we are exposed to a wide variety of non-verbal vocal cues. If, early in their lives, children begin to attend to the information available in non-verbal vocal cues, they will become more effective communicators in their personal lives and more appreciative participants in theatre experiences.

SUBJECT AREA(S)

Aesthetics and Arts Elements: Theatre Arts

Exploration of the communicative potential of the human face; exploration of communicative potential of posture, movement, and the body; exploration of non-verbal vocal communication; how clothing and hand properties communicate non-verbally; how such communication is used aesthetically in theatre.

INTENDED USERS AND BENEFICIARIES

Non-Verbal Communication was designed for and formally tested with first-grade students. It can successfully be used with second-, third-, and fourth-graders as well.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package is for students to a) be able to decode and encode various non-verbal stimuli or cues which communicate emotions, ideas, moods, and roles or conditions-in-life; b) to perceive the function of non-verbal communication in their daily lives and in theatrical contexts; and c) to use non-verbal communication consciously for creative purposes.

PATTERNS OF USE

Non-Verbal Communication is a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in drama or linked with other AEP packages which are related to music, art, dance, and literature and which are clustered around "Aesthetics and Arts Elements."

ASSESSMENT PROVISIONS

While there are no formal tests, the teacher is provided with checklists for assessing student learning by observing their behavior on package tasks. In addition, the Teacher's Guide contains samples of appropriate and inappropriate student responses.

TIME REQUIREMENTS

The lessons in Non-Verbal Communication require approximately eight to ten hours to complete.

IMPLEMENTATION PROCEDURES

Non-Verbal Communication does not require a specialist teacher. Instructions are adaptable for small or large groups. Students work individually or in pairs through most of the lessons.

The materials in this package are now in prototype stage. They are being designed to be as durable as possible. Based on information received from testing situations, the materials in final form will be very durable.

MATERIALS, EQUIPMENT, AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student Materials:				
Face boards	*	**		
Transparent overlays				
Metal hand mirrors				
Student answer booklets				
Flipbooks				
Teacher Materials:				
Sound tapes		**		
"Activity Song" lyrics				
16mm film				
Answer booklet				
Guide to Student Behavior				
Teacher's Guide				

*Materials are still in the prototype stage.
**Packaging and cost determinations have not yet been made.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socio-economic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the

program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials.

Despite the fact that there were administrative difficulties with the test sites (one classroom was eliminated because of a teacher's strike midway into the teaching of the package; in another, because of the team teaching arrangement, the students originally using the package, were reassigned and other students took their place), in one classroom all students indicated they "enjoyed" the package. A specially constructed test asked students after receiving instruction to respond to an emotion with an appropriate non-verbal communication. The evaluator scored student responses on a pass-fail basis. In two classrooms, the majority of students were able to show an emotion through facial expression, posture, body movement, gesture, and body placement.

AVAILABILITY

The anticipated date of publication for Non-Verbal Communication is lat 1975. The pacakge is copyrighted.

INFORMATION CURRENT AS OF MARCH 1975

Evidence to Support Assurances and Claims for Non-Verbal Communication

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1972). This source explains in detail the standard procedures followed in the development and evaluation of this product. A hothouse evaluation report was prepared for this package, and describes the results of intensive observation of package activities in a single classroom trial. A pilot evaluation report shows the results of package trial in three different classroom settings. Both hothouse and pilot evaluation reports were completed for Non-Verbal Communication.

Effectiveness:

Students in the one classroom with a stable student population were asked if the "enjoyed" the package or not. All responded they did. Further, 73% stated that they liked the package either "better than most subjects" or "best of all" (see page 23, Pilot Report).

Students in two of the classrooms were asked to respond to an emotion with appropriate non-verbal communication. The evaluator scored the responses on a pass-fail basis. The percentage of students passing on each of the five dimensions were:

Facial expression	98%
Posture	85%
Body Movement	75%
Gesture	85%
Body Placement	63%

(see page 25, Pilot Report).

NIE PRODUCT: SHAPE
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory, Inc.)
3120 59th Street
St. Louis, Missouri 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Rene Michel-Trapaga, Product Developer

NARRATIVE DESCRIPTION

This package, part of the Aesthetics and Arts Elements group of the Five Sense Store materials, introduces students to concepts basic to a further exploration of shapes. The Things About Shapes book introduces package concepts and supplies instructions for the activities. Students discover that shapes are everywhere, that shapes are things and things have shape, that shapes are sometimes found inside other shapes, and that shapes put together make bigger shapes. In addition to working with Things About Shapes, students and teachers search the classroom and the outside environment for examples of package concepts; the students explore their new information about shapes in their own drawings; and they cut shapes from worksheets included with the package and arrange these to discover how small shapes can be combined to form larger shapes.

This package will encourage students to: 1) become aware that all things in our surroundings have shape and that shapes can be categorized. They will recognize that while the outline of a thing is often considered its total shape, the inside, the outside, texture, color, volume, and size are also aspects of shape; 2) recognize shapes in different visual frames of reference--shapes within other shapes--and to be able to identify geometric shapes, biomorphic shapes, or combinations; and 3) create shape compositions, which helps them to perceive simple and complex visual relationships.

Sample Lesson
(Addressed to Teachers)
Lesson 2

Concept: Some shapes are inside other shapes.

Objective: By observation, the students recognize shapes in different visual faames of reference--shapes within other shapes--and are able to identify geometric shapes, biomorphic shapes, or combinations.

Procedure: The students will locate and discuss shapes inside other shapes from their immediate environment.

This lesson is an introduction to one aspect of the idea that complex shapes can usually be looked at as a grouping of smaller shapes.

Being able to perceive and point out parts in larger wholes is a skill that allows young students to deal with quite complicated visual compositions without confusion or frustration. This same skill has wide applicability in dealing with other kinds of wholes--hearing the melody part, or picking out the number of tone colors in a musical work, for example, increases understanding of the whole work of music. Or noting how an actor uses parts of his body in theatrical characterization--his voice, his face, his arms and hands--can make a complex series of events more understandable and meaningful to an informed audience member. This activity will help students deal more knowledgeably with a part of the whole visual phenomena--shape.

Use the following questions to have the students demonstrate their understanding of the concept that shapes may be found inside other shapes.

> Look at your shoes.
> Can you find a shape inside other shapes?
>
> Look at the room.
> Can you find shapes inside of other shapes?
>
> Can you find a shape inside of a shape inside
> of a shape?

Consider using this exercise as a basis for group discussion so that you can tell whether the students can, in fact, perceive shapes inside other shapes.

Examples of shapes inside of shapes can be found in the student's booklet, Things About Shape.

IMPLEMENTATION PROCEDURES

Shape does not require a specialist teacher. The package has been tested with students in grade two, but may be used with younger and older students at the discretion of the teacher. There are various possibilities for structuring the activities in this package. The student books were written to be almost totally self-instructional for students, but most sections will benefit from added information by the teacher. The teacher may instruct the whole group on what to do and then allow smaller groups to work at various times, or she may let individual students or small groups work independently with the materials.

MATERIALS, EQUIPMENT, AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student Materials:				
3 Things About Shape books 3 Pads of individual worksheets	1 set per 6 students	$27.50*	Worksheets consumable yearly.	
Teacher Materials:				
Teacher's Guide		$ 3.95*		

*Prices subject to change.

Summary Cost Information

Packages can be purchased in varying multiples of six, for example, 12-student, 18-student, or 24-student sets. Student and teacher materials can be purchased separately, so that only one set of teacher materials need be purchased with two, three, four, or five student sets. Cost for one complete unit containing enough materials for one teacher and six students is $31.45.

Personnel Required for Production Adoption and Implementation

The classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher and by CEMREL, Inc. Curriculum consultation is also available from CEMREL, Inc. Costs for these services can be obtained from each organization.

SUBJECT AREA(S)

Aesthetics and Arts Elements: Visual Art

An infinite variety of shapes exist in the environment. Some shapes exist within other shapes and some complex shapes are made up of smaller shapes. In combination with the other two shape packages (Shape Relationships and Shapes and Patterns) the visual elements of shape, color, texture, size, volume, and dimension are explored.

INTENDED USERS AND BENEFICIARIES

Shape is designed for students at the primary-grade level.

GOAL(S) OR PURPOSE(S)

The purpose of this package is to establish the relationship between an art element, shape, and the whole visual work; to sharpen the students' abilities to perceive both simple and complex shapes; to help students visualize the interrelationship between shape and other aspects of visual phenomena; and to lead students to make aesthetic judgments about visual phenomena both in the environment and in the visual arts.

PATTERNS OF USE

Shape is a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing elementary art curriculum; taught as a unit with the other two shapes packages (Shape Relationships and Shapes and Patterns); linked with the other AEP units in the Aesthetics and Arts Elements group; or used to develop basic sensory perception skills.

ASSESSMENT PROVISIONS

While there are no formal tests, teacher and students are involved in assessing learning by analyzing student oral responses and student products. Guidelines for evaluation are contained in the Teacher's Guide.

TIME REQUIREMENTS

Shape requires approximately 15 hours to complete, depending upon the number of students a teacher has and whether or not she divides them into groups when working with the package. The various activities within the package require from 30 minutes to one hour to complete.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socio-economic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The package was tested with grade two students in local public schools from a variety of socio-economic levels. One of the activities in the package was used as a test of students' achievement of package objectives. This activity presented a variety of shapes which students were to cut out and glue into a larger shape. At least 76% of the students were able to perform at or above the criterion level, as judged by a panel of evaluators.

AVAILABILITY

Shape is currently available from the publisher. This product carries a 1973 copyright date, and copyright is claimed until 1981.

The Viking Press/Lincoln Center for the Performing Arts
625 Madison Ave.
New York, New York 10022

INFORMATION CURRENT AS OF MARCH 1975

Evidence to Support Assurances and Claims for *Shape*

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1972). This source explains in detail the standard procedures followed in the development and evaluation of this product. A hothouse evaluation report was prepared for this package, and describes the results of intensive observation of package activities in a single classroom trial. A pilot evaluation report shows the results of package trial in three different classroom settings. Both hothouse and pilot evaluation reports are available from CEMREL.

Effectiveness:

After instruction, student products from the third lesson in the workbook were judged by a panel of in-house evaluators, including an art educator with a Ph.D, the chairman of the printmaking department at a major university, a curriculum developer in art who also was an experienced teacher, an in-house evaluation specialist, and a kindergarten teacher. In that activity, each student was asked to cut out a variety of shapes and rearrange them into a larger shape. The new shapes were glued to a piece of paper. he following table represents the judgment of the evaluators of the level of accomplishment of the students.

Number of Students Reaching Criterion Level on Each Product
S=87

Product #	Not Done	%	Poor	%	Average	%	Good	%	Excellent	%
I	1	1	15	17	26	30	29	33	16	18
II	2	2	18	21	29	33	29	33	9	10
III	2	2	8	9	7	8	27	31	43	49
IV	1	1	21	24	34	39	28	32	3	3

NIE PRODUCT: SHAPE RELATIONSHIPS
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
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Educational Laboratory, Inc.)
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Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Rene Michel-Trapaga, Product Developer

NARRATIVE DESCRIPTION

This package, part of the Aesthetics and Arts Elements group of the Five Sense Store materials, helps students explore relationships between different shapes, between shapes and the environment, and between shape and other visual elements (texture, size, color, and volume). A book called More Things About Shapes presents the concepts, and fold-up cubes and pyramids provided on worksheets reinforce the students' discoveries about the differences, and the similarities, between two-dimensional and three-dimensional shapes. Additional activities, such as the building of larger sculptural and architectural shapes with the fold-up shapes, reinforce the relationships discussed in the book.

This package will encourage students 1) to perceive that many things in the environment share the same or similar shape; 2) to discover that color, size, texture, and volume, as well as shape, give more complete visual information about a thing; 3) to perceive and analyze three-dimensional shapes from different physical points of view; and 4) to work with depth as it relates to shapes in space by combining two-dimensional shapes into shapes that have volume.

Sample Lesson
(Addressed to Teachers)
Lesson 1

Concept: Many things have the same shape.

Objective: The students will perceive that many different things in the environment share the same or similar shapes.

Procedure: The students observe different things which have similar shapes. They create different things from the same shapes by adding more lines and surface details, including color, texture, and volume. Their own drawings, and discussion about those drawings, helps them understand the concept involved.

The students should become aware of objects that are round or circle-like. Help your students find things around them which are similar in shape, e.g., clocks, lights, balls, oranges, etc.

Select another general type of shape, perhaps things which are more or less square or oval, and repeat the above process. In looking for objects of rectangular shape, for example, the students might find windows, doors, boxes, bricks, desks, rooms, books, or chalkboards.

Have the students use the outlines on their worksheets and draw shapes. It is not necessary that the shapes the student draws have exactly the same outline. Rather, similarity should be the key word for this activity: the concern is with things that look roundish, or free-form, or square, etc. The criteria for assessing student products are given here:

Fluency: the student should draw at least two things that share the same shape.

Flexibility: each two things the student draws on his worksheet should show redefinition of the shapes provided and each should show a quite different thing.

While elaboration is not the main point here, the addition of details to the shapes should be encouraged.

Always watch for the spirit of experimentation in the students' work.

To help students further broaden their experience with things that are generally the same in shape, lead short sight-seeing trips around the room, the school building, and/or the playground, having them watch for only round things, or only square things, or only tall, thin things, for example.

SUBJECT AREA(S)

Aesthetics and Arts Elements: General Art

There are shape similarities among things different in kind; some shapes having volume may be seen as composed of smaller shapes or planes; and volumetric shapes, too, may be combined to form larger three-dimensional shapes. Color, size, texture, and volume relate to shape. The representation of any object differs from the object itself.

INTENDED USERS AND BENEFICIARIES

Shape Relationships is designed for students at the primary grade levels.

GOAL(S) OR PURPOSE(S)

The purpose of this package is to help the students perceive that many different things in the environment share the same or similar shapes, and that these things also have color, size, texture, and volume; to help students perceive and analyze three-dimensional shapes from different points of view; to discuss depth as it relates to objects and to two-dimensional representations of those objects; and to lead students to make more aesthetic judgments about their visual world.

PATTERNS OF USE

Shape Relationships is a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing elementary art curriculum; taught as a unit with the other two shapes packages (Shape and Shapes and Patterns); linked with other AEP units in the Aesthetic and Arts Elements group; or used to develop basic sensory perception skills.

ASSESSMENT PROVISIONS

While there are no formal tests, learning is assessed by teacher and students. Student products are judged by both teacher and student, and the teacher is provided with guidelines for judging their work. Also oral responses are assessed and again, the Teacher's Guide contains cues for the teacher's evaluation of student work.

TIME REQUIREMENTS

Shape Relationships requires approximately 15 hours to complete, depending upon the number of students a teacher has and whether or not she divides them into groups when working with the package. The various activities within the package require from 30 minutes to one hour to complete.

IMPLEMENTATION PROCEDURES

Shape Relationships does not require a specialist teacher. The package has been tested with students in grade two, but may be used with younger and older students at the discretion of the teacher. There are various possibilities for structuring the activities in this package. The student books were written to be almost totally self-instructional for students, but most sections will benefit from added information by the teacher. The teacher may instruct the whole group on what to do and then allow smaller groups to work at various times, or she may let individual students or small groups work independently with the materials.

MATERIALS, EQUIPMENT AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost per Item	Replacement Rate	Source if Different from Distributor
Student Materials: 3 More Things About Shapes books 3 pads of individual worksheets	1 set per 6 students	$27.50*	Worksheets consumable yearly	
Teacher Materials: Teacher's Guide		$ 3.95*		

*Price subject to change

Summary Cost Information

Packages can be purchased in varying multiples of six, for example, 12-student, 18-student, or 24-student sets. Student and teacher materials can be purchased separately, so that only one set of teacher materials need be purchased with two, three, four or five student sets. Cost for one complete unit containing enough materials for one teacher and six students is $31.45.

Personnel Required for Product Adoption and Implementation

The classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher and by CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying socio-economic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcoming of materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gained from classroom trial indicates the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of develop- m ent, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information on a yearly basis.

The pilot evaluation of this package was carried out with grades 2 and 3 students in local schools. Specially constructed tests indicated that 70% or more of the children were able to reach standards judged to be average, good, or excellent on tasks related to the package after receiving instruction. Teacher satisfaciton with the materials was also high, as measured by post-treatment questionnaires.

AVAILABILITY

Shape Relationships is currently available from the publisher. Product carries a 1973 copyright date, and copyright is claimed until 1981.

The Viking Press/Lincoln Center for the Performing Arts
625 Madison Avenue
New York, New York 10022

INFORMATION CURRENT AS OF MARCH 1975

Evidence to Support Assurances and Claims for Shape Relationships

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1972). This source explains in detail the standard procedures followed in the development and evaluation of this package. A hothouse evaluation report was prepared for this package and describes the results of intensive observation of package activities in a single classroom. A pilot evaluation report shows the results of classroom trial in three different classrooms. Both hothouse and pilot reports exist for Shape Relationships. An Overview of Development and Evaluation of The Five Sense Store (Edwards, 1974) explains the procedure through which the Program continues to gather information on products which have passed the pilot stage of evaluation.

Effectiveness:

Second and third grade classes from a variety of socio-economic levels received instruction in a pilot version of the package. Products from the student work after receiving instruction were judged to meet a specified criterion level by a panel of evaluators. The results were:

Number of Students Reathing Criterion Level on Each Product

Product	Pattern	%	10 Shapes	%
M	26	96	23	85
	Different Pattern		10 Shapes	
N	27	100	27	100
	Different Pattern		*Well Organized	
O	24	89	13	48
	Pattern		*Complexity	
P	23	85	3	11

Teacher Satisfaction:

The questionnaire and summary of teacher responses, based on their teaching of a pilot version of the package indicate teacher satisfaction, indicating that students voluntarily went beyond the package and that the teachers felt the guide was adequate. The questionnaires are summarized in the Appendix of the Pilot Report.

NIE PRODUCT: Shapes and Patterns
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional
Educational Laboratory, Inc.)
3120 59th Street
St. Louis, Missouri 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Rene Michel-Trapaga, Product Developer

NARRATIVE DESCRIPTION

This package, part of the Aesthetics and Arts Elements group of the Five Sense Store materials, helps students discover the relationship of shapes to pattern. Instruction is centered on the student book, Things About Shapes and Patterns, which introduces the students to how color, size, texture, and volume function in the formation of visual patterns. In addition to working with the book, students also use shapes provided on worksheets to create original patterns. They are encouraged to look for examples of patterns all around them--in books, in the classroom, in nature. Additional worksheets have fold-up shapes that are used to create patterns of volumes.

This package will encourage students to 1) become aware that a pattern made up of shapes employs shape similarity, repetition, and ordering; 2) to become aware that a visual pattern can also have color, size, texture, and, in some cases, volume; and 3) to perceive and analyze similarity, repetition, and order of shape, color, texture, size, and volume in patterns found in works of art and in the environment.

Sample Lesson
(Addressed to Teachers)
Lesson 2

Concept: Patterns are made of more than shapes.

Objectives: The students will be made aware that a visual pattern can also have color, size, texture, and, in some cases, volume.

Procedure: Here students will create both flat and three-dimensional patterns. They will discuss color, size, texture, and volume in relation to patterns.

Grouping like or unlike shapes into a unit creates a new shape from the parts, and the new shape can be repeated to form a pattern. Further, color can be repeated on certain shapes or groups of shapes within a pattern, and the other elements--size, texture, and volume--can operate in the same way. Repetition, shape or shape unit similarity, and ordering remain the guiding principles.

The repetition of two things is discovered in this activity. One is repetition of shape units, and the other is the repetition of the colors of the shape units.

Have students find a shape unit in their books. Ask them which is the largest shape unit. Then ask if they can see a pattern to the repetition of colors.

> "How many different textures are repeated in this pattern?
> "How would you describe each texture?
> "What shapes are repeated to make the pattern?
> "How many different sizes are repeated in this pattern?
> "What are the shapes that are repeated?
> "What is the largest shape unit in this pattern?"

The worksheets which accompany this lesson provide the students with an opportunity to make use of the concepts explored so far. More specifically, they should be able to make patterns; make use of color, texture, and the size variations in the patterns provided on the two worksheets; and create larger units of pattern by combining the different shapes provided.

Be sure that each student has a scissors, crayons or colored pencils, 12" x 18" (or smaller) heavy paper, and rubber cement or glue.

Watch for their use of repetition, ordering, and use of similar shapes or shape units in their patterns. Allow them plenty of time to experiment and have fun with the patterns before they select their "best" to glue.

SUBJECT AREA(S)

Aesthetics and Arts Elements: Visual Art

Order and repetition and variation apply to pattern formation. A pattern is formed when one or more shapes are repeated or when elements such as color, texture, size, and volume are repeated.

INTENDED USERS AND BENEFICIARIES

Shapes and Patterns is designed for students at the primary grade levels.

GOAL(S) OR PURPOSE(S)

The purpose of this package is to help students become aware that a pattern made up of shapes employs shape similarity, repetition, and ordering, and that a visual pattern can also have color, size, texture, and in some cases, volume. The students will be able to perceive and analyze the elements of pattern in the environment and in works of art, and will thus increase their ability to make aesthetic judgments about visual phenomena.

PATTERNS OF USE

Shapes and Patterns is a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing elementary art curriculum; taught as a unit with the other two shapes packages (Shape and Shape Releationships); linked with other AEP units in the Aesthetics and Arts Elements group; or used to develop basic visual perception skills.

ASSESSMENT PROVISIONS

While there are no formal tests, students and teacher assess learning by analyzing both oral responses and student products. The Teacher's Guide contains guidelines for assessment of learning.

TIME REQUIREMENTS

Shapes and Patterns requires approximately ten hours to complete, depending upon the number of students a teacher has and whether or not she divides them into groups when working with the package. The various activities within the package require from 30 minutes to one hour to complete.

IMPLEMENTATION PROCEDURES

Shapes and Patterns does not require a specialist teacher. The package has been tested with students in grade two, but may be used with younger and older students at the discretion of the teacher. There are various possibilities for structuring the activities in this package. The student books were written to be almost totally self-instructional for students, but most sections will benefit from added information by the teacher. The teacher may instruct the whole group on what to do and then allow smaller groups to work at various times, or she may let individual students or small groups work independently with the materials.

MATERIALS, EQUIPMENT, AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student Materials:				
3 Things About Shapes and Patterns books	1 set per 6 students	$36.00*		
6 Pads of individual worksheets			Worksheets consumable yearly	
Teacher Materials:				
Teacher's Guide		$ 3.95*		

*Prices subject to change.

Summary Cost Information

Packages can be purchased in varying multiples of six, for example, 12-student, 18-student, or 24-student sets. Student and teacher materials can be purchased separately, so that only one set of teacher materials need be purchased with two, three, four, or five student sets. Cost for one complete unit containing enough materials for one teacher and six students is $39.95.

Personnel Required for Product Adoption and Implementation

The classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher and by CEMREL, Inc. Curriculum consultation is also available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socio-economic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information on the utilization of the published version of the package on a yearly basis.

The package was tested with grade two students in local schools from a variety of socio-economic levels. One of the activities in the workbook was used as a test of whether the students achieved the package objectives. A panel of evaluators judged whether students met the criterion for making shapes into different patterns. 98% of the students performed at or above the criterion level.

AVAILABILITY

Shapes and Patterns carries a 1973 copyright date, and copyright is claimed until 1981. It is currently available from the publisher/distributor:

The Viking Press/Lincoln Center for the Performing Arts
625 Madison Avenue
New York, New York 10022

INFORMATION CURRENT AS OF MARCH 1975.

Evidence to Support Assurances and Claims for Shapes and Patterns

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1972). This source explains in detail the standard procedures followed in the development and evaluation of this product. A hothouse evaluation report was prepared for this package, and describes the results of intensive observation of package activities in a single classroom trial. A pilot evaluation report shows the results of package trial in three different classroom settings. Both hothouse and pilot evaluation reports were prepared on Shapes and Patterns. An Overview of Development and Evaluation of the Five Sense Store (Edwards, 1974) explains the procedure through which the program continues to gather information on products which are presently being used in the field.

Effectiveness:

After instruction in two classrooms, student products from worksheets 1, 2, and 3 in workbook were judged by a panel of evaluators. The students were asked to rearrange increasingly abstract shapes into different patterns. The evaluators judged 98% or more of the students in each class to have achieved the criterion level (see conclusions Pilot Report).

On an orally administered questionnaire, 54% of the students who received instruction in the package indicated either very high or high satisfaction with the materials (see Appendex A, Pilot Report).

The teachers who taught the package indicated that they would recommend the materials to other teachers and that their own students were excited by the package and voluntarily went beyond it, doing additional activities and bringing relevant materials from home (see Appendix C, Pilot Report).

Table : Number of Students Reaching Criterion Level on Product F: Shapes II

S-83

Product F	Nothing	%	Only One Shape	%	Two Shapes Diff. Type	%	Two Shapes Diff. Kind	%
1a					18	22	65	78
b			1	1	47	57	35	42
2_4					2	2	81	98
5					45	54	38	46
6					7	8	76	92
3_7					6	7	77	93
8	1	1			16	19	66	80
9	2	2			22	27	59	71

from "Pilot Report: Shapes and Patterns" (July, 1972), page 17.

NIE PRODUCT: MOVEMENT
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory, Inc.)
3120 59th Street
St. Louis, Missouri 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Linda Slama Kelly, Product Developer

NARRATIVE DESCRIPTION

One of the Aesthetics and Arts Elements series of the Five Sense Store packages, this set of materials introduces students to movement as a phenomenon that pervades our own lives and almost all environments. The elements of movement, which give it form, are space, time, and force. Its aesthetic qualities become obvious when movement functions as a medium of expression through the manipulation of these elements.

The expressive potential of movement is extensive. It can be used in symbols and gestures representative of ideas, events, or feelings. For instance, the way a person walks or stands may reveal his feelings and thoughts, just as the way a dancer moves conveys a particular feeling. Movement can also be appreciated for its own innate qualities and forms. That is, movement can be appreciated simply as movement, as being expressive in its own right, not as an expression of something else--movement for movement's sake, so to speak. Having such a variety of expressive potential, it has found its way into many art forms, such as kinetic sculpture, film, dance, and pantomime.

The purpose of this Movement package is to develop an awareness of movement in general and of its expressive elements in particular. An awareness that through the manipulation of these same elements movement can be employed as an expressive medium for art will increase the students' perceptions of and responses to art works and to natural events in the environment which include movement as an expressive force.

To reach this goal, the students will explore and manipulate selected properties of space, time, and force via human movement. The students' own body movements serve as the tool with which they will experience, perceive, and respond throughout this package. Besides being a mode already familiar to young children, it provides a natural liaison with two of the art forms in which movement is used aesthetically--dance and drama. Although this is not geared to be a "dance" package, the students will have the extra benefit of manipulating, exploring, and improvising in their creative problem-solving through the use of movement. The process, as well as the content, therefore, should provide the student with a better understanding, or at least awareness, of the aesthetic dimension of movement in the performing arts, theatre, and dance.

Sample Lesson
(Addressed to Teachers)

Lesson 13: Manipulating the Elements of Movement for Expression

General Description: The students will shape movements of their own and vary their expressive effects by manipulating the elements.

Background: This last activity attempts to integrate the ideas in the package into a meaningful experience. Here the students will discover that all of the elements are operating at all times in any movement and that changing any one element will affect the total movement. Thus, the previous exposure to simplify the nature of movement (energy in space during time) is now carried to a beginning awareness of form (interrlationship and organization of the elements). While the package ends with this activity, the students' thinking is hopefully opened up and stimulated for future experiences.

Procedure: Have the students each find an empty space to work in. Direct them to make a movement that uses their head and one leg. Give them a couple of minutes to practice it so that it is defined and set.

Encourage them as they practice to find something on their own which is special to them and not a copy of their neigh[illegible] movement.

When they all seem to be ready, tell them to do the same movement but change the timing in some way. "Try to take longer or shorter; try it very fast or very slow. Which is best for your movement?"

Next have them go back to their original movements before timing change. Say, "Now change the space it takes to do it in."

Again, have them return to their original movement. "Now change the energy you use to do your movement. Try it jerky, smooth, sharp, relaxed."

Give them time to explore and be slightly frustrated until they discover a solution for each change. You may help those who are obviously completely stuck by suggesting a variation for them to try.

Repeat this process with a new movement including the back, one arm, and one foot.

Finally, set the task. Tell the students to find a movement that uses their whole body, practice it until it is just right; and then change it three times: change the timing, then change the space, then change the energy.

Suggest that they practice all their changes until they feel ready to show them to a friend. After they demonstrate their movement, have them watch their friend's movement. The two should tell one another if they can see the change in space and then in timing and in energy. If not, they should work on it more until it's clear and then show it again. If some students seem unable to work alone, suggest that they work with a partner or in a small group of three.

If some students want to demonstrate their work to everyone else, by all means allow it. But do not force performance. Premature performance can produce self-consciousness and inhibit creativity. It is always best to have students demonstrate in groups of three or four at a time.

SUBJECT AREA(S)

Aesthetics and Arts Elements: Dance

Expressive potential of movement; familarity with and manipulation of the elements of movement--space, time, and force; integration of elements of movement into an aesthetic form.

INTENDED USERS AND BENEFICIARIES

Movement was designed for and formally tested with students in the third grade. At the discretion of the teacher, it would be suitable for fourth-grade students as well.

GOAL(S) OR PURPOSE(S)

The purposes of this instructional package are for students to 1) become aware of movement as a phenomenon that pervades our lives; 2) become familiar with and to be able to manipulate the expressive elements of movement; and 3) become aware that through the manipulation of these same elements movement can be employed as an expressive medium for art.

PATTERNS OF USE

Movement is a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in dance or linked with other AEP packages which are related to music, art, drama, and literature and which are clustered around "Aesthetics and Arts Elements."

ASSESSMENT PROVISIONS

One diagnostic activity is included with the materials and it is for pre/post-test use only. Throughout the activities student learning is assessed by both teacher and students. Appropriate guidelines for assessment are built into the Teacher's Guide.

TIME REQUIREMENTS

The lessons in Movement require approximately 12 hours to complete. The teacher is advised to spend no more than 40 minutes at a time on any one lesson.

IMPLEMENTATION PROCEDURES

Movement does not require a specialist teacher. It can be taught to small groups or large groups of students. All of the lessons require a large, clear floor area for movement explorations. The Teacher's Guide outlines all procedures for the teacher and has been rated as quite useful in testing situations.

MATERIALS, EQUIPMENT, AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student Materials:				
3 "Your Body Moves" booklets 3 20' lengths of colored yarn	1 set per 6 students	*	No consumables	
Teacher Materials:				
Body charts Fabric bag Sand clock Set of 8 x 10 photos Film, "Movement in Dance" Teacher's Guide		*		

*Prices for these materials have not yet been determined.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training in dance can implement this instructional package. Workshops are offered by the publisher and by CEMREL. Curriculum consultation is also available from CEMREL. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socio-economic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information on the utilization of the published version of the packages on a yearly basis.

The pilot evaluation of this package was carried out with third-grade students in local schools. One diagnostic test having two major components (verbal and visual) was constructed for the evaluation of this package, focusing upon the more important outcomes of package instruction. The tests were administered in the classrooms which participated in pilot trial and in an equal number of control group classrooms. When students who had taken the full unit were compared with control group students, those instructed with the unit earned higher scores on each of the two components. The score differences in favor of students who used the materials were statistically significant. Student performance on this test supports a claim for product effectiveness. The product cultivates in students a realization that through manipulation of these elements—space, time, and force—movement can be employed as an expression medium for art.

AVAILABILITY

The anticipated completion date of Movement is late in 1975. The package is copyrighted.

INFORMATION CURRENT AS OF MARCH 1975

Evidence to Support Assurances and Claims for Movement

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1972). This source explains in detail the standard procedures followed in the development and evaluation of this product. A hothouse evaluation report was prepared for this package, and describes the results of intensive observation of package activities in a single classroom trial. A pilot evaluation report shows the results of package trial in three different classroom settings. Both hothouse and pilot evaluation reports are available.

Effectiveness:

A student questionnaire and a teacher questionnaire were administered post package. Student response was largely favorable (usually around 70%) toward the package in its content, concepts, approach, and length.

In the teacher's questionnaire, the Teacher's Guide was rated quite favorably. Overall reaction to the package materials was quite favorable in regard to appearance, ease of use, and durability.

A pre-test/post-test control group design was used in pilot testing the Movement package. The overall design was a one-between groups by one-within groups repeated measures factorial with three observations (class means) per cell. The components of the cognitive-type criterion referenced test were divided into two major parts: the verbal and the visual. As indicated by the labels used, the verbal component consisted of those items that were heavily loaded on a verbal test format; the visual component consisted of those items involving strictly visual or pictorial input. The sum of the two components constituted the total test score. Within the context of the one-between by one-within groups design, a separate analysis of variance was performed on each of the three major test components. The results generally support the conclusions that the goals of the package were achieved and that taking the test twice did not unduly inflate the post-test gains (pp. 13-14, Pilot Test Report, February 1972).

C. Aesthetics and the Creative Process Series

Summary Statement: Aesthetics and the Creative Process Series (Grades 2-3)

Objectives: To identify major concepts, approaches to study, objectives, and alternate solutions to the problems of analysis and selection of curriculum content Aesthetics and the Creative Process for grades 2-3. To implement the development, trial teaching, and revision of units of instruction in these areas by preparation of three multi-media sets of materials, which, when added to the materials completed before the start of the NIE contract, will complete this series, approximately 11 instructional units in all.

Description: In these instructional units the students work with elements of the arts and the environment and creatively transform them into a whole work. The students learn that all people who create art, no matter what the arts discipline, go through a similar process of originating an idea and organizing elements into an end product to communicate that idea. Some of the activities in which the students make their own structure for the creative process are: creating a characterization, constructing a dramatic plot, relating sounds and movements, and creating word pictures.

Instructional units in this Series include:

Making Patterns into Sounds	1
Examining Point of View	2
Perceiving Sound Word Patterns	2
Relating Sound and Movement	2
Creating with Sounds and Images	2
Analyzing Characterization	2
Creating Word Pictures	3
Constructing Dramatic Plot	3
Creating Characterization	3
Arranging Sounds with Magnetic Tapes	3
Forming with Movement	3

Outcomes: The student organizes his own method, or structure, for completing a whole work of his own design.

The student can describe and analyze the aesthetic decisions he used in completing the whole work.

The student transforms the elements into whole works in a number of arts disciplines and, therefore, can contrast the methods, or structures, of the individual disciplines.

The student is able to criticize, using his own aesthetic criteria, his own work and that of his peers.

Status Report: As of November 30, 1975, 11 instructional units will be completed.

The following information describes each instructional unit in more detail.

NIE PRODUCT: MAKING SOUNDS INTO PATTERNS
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory, Inc.)
3120 59th Street
St. Louis, Missouri 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Edward Sweda, Product Developer

NARRATIVE DESCRIPTION

One of the Aesthetics and the Creative Process series of Five Sense Store packages, Making Sounds into Patterns is designed to provide primary students with some basic skills which will help make them more sensitive listeners to music. The students take part in listening and performing activities intended to initiate appreciation of whole musical works through conscious awareness of musical components.

This package stresses an understanding of the part played by patterns of sound duration and pitch in the total musical work. Students listen to short, medium, and long sound durations and manipulate symbols representing these periods of sound. Using the visual symbols, the students create patterns by combining various sound durations in a series. Then they perform their own patterns or those of their classmates with a musical instrument or their own voices. The package's next step adds pitch to the duration patterns. This approach readies students to understand that whole musical works are constructed of patterns which supply form, variety, and unity to a musical work.

Certain basic musical skills are necessary for providing access to higher musical understanding. Such skills are essential because the highly abstract nature of music requires students to reach an aural starting point from which to move along a path toward musical understanding.

The approach of this package to the understanding of communication is based on the students' current level of relating to sound, that is, their relationship to the three levels of aural perception--hearing, listening, and assessment. Most primary students have attained the hearing level. This level has no special aesthetic significance and may be equated with a visual equivalent of looking but not seeing. On the other hand, the third level, assessment, implies analysis and performance training. To the young student, this level is of no major consequence. It is the remaining level--listening--which can provide for the primary student a major inroad into the art of music.

Sample Lesson
(Addressed to Teachers)

Lesson 6: Creating Patterns of Sound Duration and Pitch

General Description: The student will create his own patterns of sound duration and pitch, and the class will perform their compositions.

Procedure: You have now arrived at the most vital experience of this package. Students can become creators of original patterns. It is hoped that they will insist on new durations for more variation and develop original symbols for implementing these durations.

Distribute student color-coded pattern sheets and pencils. You may begin this experience by saying to the students,

> "Can you write out a pattern? What kind of marks can you make to show l--o--n--g, m-i-d-d-l-e, and short! durations in your pattern?"

At first encourage them to think in terms of making symbols with their pencils that look like the desk-top symbols they used earlier.

Tell the students,

> "When you have finished your own patterns, we will choose one to place on the large pattern board. Then you and the whole class will play it."

When most of the students have had time to create original patterns, choose one and copy it onto the large pattern board with large duration symbols.

> "O.K. class—let's play Andy's pattern." Or, "Andy will play his pattern."

After the pattern has been played, collect all the materials.

SUBJECT AREA(S)

Aesthetics and the Creative Process: Music

Exploration of patterns of sound duration; exploration of patterns of pitch duration; relationship of patterns of sound and pitch duration to total musical work; creation of student patterns of sound and pitch durations.

INTENDED USERS AND BENEFICIARIES

Making Sounds into Patterns has been designed for and formally tested with students in the first grade.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package is for students to understand the part played by patterns of sound duration and pitch in a total musical work.

PATTERNS OF USE

Making Sounds into Patterns is a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in music or linked with other AEP packages which are related to art, dance, drama, and literature and which are clustered around "Aesthetics and the Creative Process."

ASSESSMENT PROVISIONS

While there are no formal tests, teacher and students assess learning by judging student products and oral responses. Guidelines for assessing the responses are written in the Teacher's Guide.

TIME REQUIREMENTS

Making Sounds into Patterns requires approximately 5 hours to complete.

IMPLEMENTATION PROCEDURES

Making Sounds into Patterns will not require a specialist teacher. The lessons in the package call for large or small group instruction in addition to individual student work. Students may have to sit on the floor in order to be close enough to the pattern board to see it clearly.

The teacher is encouraged to relate the concepts in Making Sounds into Patterns to harmony in music.

MATERIALS, EQUIPMENT AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost per Item	Replacement Rate	Source if Different from Distributor
Student Materials:				
large pattern board with 36 duration symbols; 12 short, 12 middle, 12 long	*	*		
packets of student, desk-top symbols				
color-coded student pattern sheets				
student pattern reading booklets				
Teacher Materials:				
Teacher's Pitched Pattern Booklet		*		
Cassette Information Tape				
Teacher's Guide				

*Materials in this package are still in the prototype stage. Packaging and cost determinations have not yet been made.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training in music will be able to implement this instructional package. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socio-economic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information on the utilization of the published version of the package on a yearly basis.

Two stages of developmental evaluation of this package have been carried out in four first-grade classrooms in the St. Louis area. Interviews with the students indicate that the great majority of them enjoyed working on the package and almost all of them had learned the key concepts in the package.

Other results of the interviews conducted with students and teachers have indicated that certain modifications should be made in these materials with regard to the student equipment supplied and clarification of goals (see Pilot Report, pp. 19-20, May 1974). These revisions will be carried out before the materials are published.

This package is primarily experiential in nature. For this reason further claims based on technical data cannot be made at this time. There are tentative indications that experience with the materials may lead to increased musical memory and may serve as an advance organizer for future experience in learning musical notation. The same care used in developing this product is evidenced in CEMREL's decision to revise it further after the two stages of evaluation already completed.

AVAILABILITY

The anticipated completion date of Making Sounds into Patterns is late 1975. The package is copyrighted.

INFORMATION CURRENT AS OF MARCH 1975

Evidence to Support Assurances and Claims for Making Sounds into Patterns

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1972). This source explains in detail the standard procedures followed in the development and evaluation of this product. A hothouse evaluation report was prepared for this package, and describes the results of intensive observation of package activities in a single classroom trial. A pilot evaluation report shows results of package trial in three different classroom settings. Both hothouse and pilot evaluation reports have been completed for Making Sounds into Patterns.

The claim of careful product development is substantiated here by virtue of the program's avoidance of premature release of these materials until the problems encountered in the formative evaluation stages have been solved. The procedures used in the development of these materials are further supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1969), and the Supplement to the Basic Program Plan, Aesthetic Education Program (CEMREL, 1973).

Effectiveness:

The questionnaire and interview information is based on work in three classrooms. Interviews with the students showed that 85% enjoyed their work with the materials, as well as, or better than, their other school subjects and more than 90% were able to teach back the use of key package components (see Pilot Report, pp. 5 and 7, May 1974).

The evidence for the speculations regarding the package's ability to act as an advance-organization element is based on a time series analysis of the mean scores of intact classrooms using test instruments constructed ad hoc for this package. These results are clearly in need of cross-validation on a larger sample before a definite claim can be made.

NIE PRODUCT: EXAMINING POINT OF VIEW
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional
Educational Laboratory, Inc.)
3120 59th Street
St. Louis, Missouri 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Donna Anderson, Product Developer

NARRATIVE DESCRIPTION

The Aesthetics and the Creative Process group of Five Sense Store packages includes this package, which introduces the conceptual and physical aspects of point of view and helps students find and show their own points of view with a camera. Two basic premises of photographic art are presented: first, the artist uses the camera viewfinder as a tool in expressing himself; and second, the artist, as he manipulates point of view, uses the environment as a content source. The Point of View book presents examples of photographic techniques for showing ideas and suggests criteria for judging the expressiveness and the aesthetic quality of a photograph. Students use a range of additional materials, from cut-out frame corners to a Polaroid camera, to learn that photography is an artistic vehicle that can be used to present one's own point of view.

This package will encourage students 1) to form a personal definition of point of view; 2) to express their visual points of view through use of a viewfinder and camera; 3) to delimit subject matter, select view, and create perspectives in their photographs; and 4) to attach personal preference to their photographic decisions--selection, editing, and combination--and to discuss their preferences.

Sample Lesson
(Addressed to Teachers)

Lesson 2: The Camera Is a Tool to Show Points of View

Concept: The medium of photography can be used to express one's unique point of view.

Objective: The students will become familiar with the basic parts and operations of a camera, and will take practice photographs.

These pages link Section 1, where students explored various definitions of point of view, to the remainder of the book. Here the camera is presented as a mechanical tool for expressing one's own point of view in photographs.

A short conversation can help students use the book as a tool for investigating photographic expression of point of view. Ask, "Do you think that if each of you had a camera, all of you would take the very same photograph?" Students' answers will build on any of their experiences in defining point of view (for example, the fact that no two students made the same drawing in response to a description of an imaginary thing).

Be sure that the students read through all the "things to remember"--all are common mistakes made by beginning photographers. Then, during some break in the day, take the students outside in a group, or in small groups, and let them take one or two practice photographs. Remind them of the "things to remember" and of the instructions for operating the cameras, and help them to build confidence in their picture-taking ability. Check each student to be sure he is operating the camera correctly. Keep a record of which student took which photograph. The easiest way is probably to jot down the number from the back of the film cartridge next to the student's name.

After you are familiar with the operation of the Polaroid camera, let the students take some Polaroid pictures. Being able to see a picture immediately will help them remember the "things to remember."

If each student takes a photograph of another student, all will have a personal photograph that will demonstrate the "things to remember" as well as provide a photographic identification for their Point of View photobook.

SUBJECT AREA(S)

Aesthetics and the Creative Process: Photography

The several definitions of point of view, all of which are helpful in perceiving and analyzing things and ideas; photography as a medium to express one's unique point of view; process of selecting subject matter from the environment; manipulation and selection of distance, angle, and view; use of different angles, view, distances, and points of view to create photographs; use of photographs to create a photo essay showing one's own point of view.

INTENDED USERS AND BENEFICIARIES

Examining Point of View has been formally tested with students in second grade. It has been successfully used, however, with students in grades three to seven.

GOAL(S) OR PURPOSE(S)

Students will understand two basic premises of photographic art: 1) that the artist uses the viewfinder and camera as expressive instruments for his visual statements; and 2) that the artist, through manipulating point of view, draws on the environment as his source for inspiration and expression.

PATTERNS OF USE

Examining Point of View is a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in photography; linked with other AEP packages which are related to music, art, dance, literature, and theatre and which are clustered around "Aesthetics and the Creative Process"; or used with programs in many other disciples, e.g., social studies, to which the concept of "point of view" is applicable.

ASSESSMENT PROVISIONS

While there are no formal tests, teacher and students assess learning by analyzing the photographs taken by the students. Guidelines for the analysis are built into the package.

TIME REQUIREMENTS

Examining Point of View requires a minimum of 20 hours to complete, excluding the final photographic essay. Each section requires at least two hours to do, but the time periods can be further broken down at the teacher's discretion.

IMPLEMENTATION PROCEDURES

Examining Point of View does not require a specialist teacher. Students work on small group and individual bases at various times during this package and work both indoors and out. Many of the activities require students to move about, perhaps to get up on a table or down on the floor. In addition, students need freedom to move around the whole classroom. The Teacher's Guide outlines all procedures and has been rated as quite useful in field trials.

The teacher is encouraged to relate the concepts in this package to other arts areas.

Field reports indicate that the materials stand up well with repeated use. Consumables are easily purchased from the publisher.

MATERIALS, EQUIPMENT, AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student Materials:				
3 Point of View books (72 pp)	1 set per 6 students			
1 pad of frame corners (30 in each pad)		$27.50*	Consumable yearly	
1 pad of activity photographs (30 in each pad)			Consumable yearly	
1 pad of view-finders (30 in each pad)			Consumable yearly	
Teacher Materials:				
Teacher's Guide		$ 3.95*		

NOTE: There are two camera unit packages available for this title.

Option A: 6 Simplex Snapper cameras, 12 rolls of film
1 Polaroid camera, 1 pack of film, 2 flashcubes, film processing mailers
2 plastic photo display cubes, instructions. $75.05*

Option B: Same as Option A but without Polaroid equipment. $35.36*

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*Prices subject to change.

Summary Cost Information

Examining Point of View can be purchased in sets of varying multiples of six, e.g., 12-student, 18-student, 24-student sets. Student materials and teacher materials can be purchased separately so that only one teacher set need be purchased with two, three, or four student sets. Cost for one complete unit containing enough materials for one teacher and six students is $31.45. With Camera Option A the total is $106.50. With Camera Option B the total is $66.81

Personnel Required for Product Adoption and Implementation

The classroom teacher without special training in photography can implement this instructional package. Workshops are offered by the publisher and by CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socio-economic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the

program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain informaiton on the utilization of the published version of the packages on a yearly basis.

The pilot evaluation of this package was carried out with grade two students in local schools. Specially constructed tests regarding the basic goals of the package compared students taking the package to untreated students. Treated students taking a photograph of a single subject used a greater variety of points of view after the package than before. They also were able to identify one aspect of point of view significantly better than the untreated students on a matching test. Student satisfaction with the materials was also high, as measured by post-treatment attitude scales. Limited use in the extended pilot studies has confirmed these findings.

AVAILABILITY

Examining Point of View was copyrighted in 1973 and copyright is claimed until 1981. It is currently available from the publisher/distributor:

The Viking Press/Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

INFORMATION CURRENT AS OF MARCH 1975

Evidence to Support Assurances and Claims for Examining Point of View

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1972). This source explains in detail the standard procedures followed in the development and evaluation of this product. A hothouse evaluation report was prepared for this package, and describes the results of intensive observation of package activities in a single classroom trial. A pilot evaluation report shows the results of package trial in three different classroom settings. Both hothouse and pilot evaluation reports were prepared on Point of View. An Overview of Development and Evaluation of the Five Sense Store (Edwards, 1974) explains the procedure through which the program continues to gather information on products which are presently being used in the field.

Effectiveness:

1. Photograph of single subject: Second-grade classes from a range of socio-economic levels were used for the package group and were taught a pre-publication version of the package. The following table summarizes pre- and post-test differences. (Table 7)

   In comparing class means, treatment students took photographs from more different angles, with more variety in the distance, and more variety in perspective (significance at either .05 or .01 level, see p. 36, Pilot Report).

2. Identifying aspects of Point of View (matching test): Second-grade classes from a range of socio-economic levels were used for both the pre-publication version of the package and control groups. Students who were taught the package were better able to match a picture with a description of the point of view (see Table 4, p. 33, Pilot Report).

3. Satisfaction: Students who received the package responded to a post-package questionnaire in which they indicated they liked the materials, and felt they learned a lot. The results are summarized in Table 2, p. 31, Pilot Report.

TABLE 7

POINT OF VIEW
COMPONENTS OF CHANGE FOR PHOTOGRAPHY TEST

NUMBER OF DIRRERENT CATEGORIES WITHIN EACH SCHOOL

TEST		PRETEST			POSTTEST				DIFFERENCES			
Component	S	B	A	D	S	B	A	D	S	B	A	D
Barretts	6	3	4	6	22	3	10	9	16	0	6	3
ommons Lane	7	2	3	4	20	9	9	7	13	7	6	3
ield Branch	11	3	3	3	24	8	10	7	13	5	7	4
TOTALS	24	8	10	13	66	20	29	23	42	12	19	10
Averages	8	2.7	3.3	4.3	22	6.7	9.7	7.7	14	4.0	63	3.3
reensfelder	17	4	8	7	13	8	7	6	-4	4	-1	-1

ey: S Sections
B Body Positions
A Angles of View
D Distances

from "Pilot Report: Examining Point of View" (May, 1972), page 36.

Point of View" (May, 1972), page 33.

TABLE 4

SUMMARY OF POINT OF VIEW MATCHING DATA

Item #	Weight	Response	Barretts	Commons Lane	Field Branch	Totals	Percentages	Hope Lutheran	Greensfelder	Jackson Park	Totals	Percentages
1	2	A	2	3	6	11	13.6	5	2	3	10	15.4
	1	B	5	2	8	15	18.5	2	3	1	6	9.2
	0	C	1	0	0	1	1.2	0	3	3	6	9.2
	3	D	22	19	13	54	66.7	11	16	16	43	66.2
2	0	E	0	0	1	1	1.2	1	0	1	2	3.1
	3	F	29	20	21	70	86.4	17	17	20	54	83.1
	2	G	0	3	3	6	7.4	0	5	1	6	9.2
	1	H	1	1	2	4	4.9	0	2	1	3	4.6
3	3	I	23	13	19	55	67.9	5	17	17	39	60.0
	0	J	1	1	4	6	7.4	1	0	1	2	3.1
	1	K	0	1	0	1	1.2	2	2	0	4	6.2
	2	L	6	9	4	19	23.5	10	5	5	20	30.8
4	1	M	0	0	2	2	2.5	0	7	1	8	12.3
	0	N	1	10	7	18	22.2	5	6	2	13	20.0
	2	O	1	0	4	5	6.2	4	3	4	11	16.9
	3	P	28	14	14	56	69.1	9	8	16	33	50.8
5	1	Q	10	9	12	31	38.3	7	9	9	25	38.5
	2	R	0	2	2	4	4.9	2	5	1	8	12.3
	0	S	1	3	5	9	11.1	3	2	4	9	13.8
	3	T	19	10	8	37	45.7	6	8	9	23	35.4
6	2	U	0	0	3	3	3.7	3	1	4	8	12.3
	3	V	11	13	14	38	46.9	7	12	14	33	50.8
	1	W	14	9	8	31	38.3	7	9	4	20	30.8
	0	X	5	2	2	9	11.1	1	2	1	4	6.2
*	Right		TREATMENT			312	64.2	CONTROL			225	57.7
	N's		30	24	27	81		18	24	23	65	

FREQUENCY TABULATION OF STUDENT RESPONSES TO STUDENT POST-QUESTIONNAIRE

Question 2
ATTITUDE TOWARDS PACKAGE
(Approach)....................(Avoid)

Point of View	V.H.	H.	S.S.	S.	V.S.
Barretts	8	10	11	0	0
Commons Lane	16	3	6	0	0
Field Branch	24	2	00	0	1
Sum	48	15	17	0	1
% of Total	59.3	18.5	21.0	0	1.2

Question 3
WANT ANOTHER PACKAGE
(Approach)....................(Avoid)

Point of View	V.H.	H.	S.S.	S.	V.S.
Barretts	14	3	8	2	2
Commons Lane	13	9	2	1	0
Field Branch	23	1	3	0	0
Sum	50	13	13	3	2
% of Total	61.7	16.0	16.0	3.7	2.5

Question 5
AMOUNT LEARNED
(Lot).........(None)

Point of View	Lot	Fair	None
Barretts	18	7	4
Commons Lane	20	5	0
Field Branch	26	0	1
Sum	64	12	5
% of Total	79.1	14.8	6.2

Question 7
INSTRUCTION TIME
(Too much)...(Wanted More)

Point of View	Too Much	Right Amount	Wanted More
Barretts	3	19	7
Commons Lane	4	18	3
Field Branch	5	21	1
Sum	12	58	11
% of Total	14.8	71.6	13.6

Question 8
READING
(Easy).....(Very Hard)

Point of View	Easy	Hard	Very Hard
Barretts	26	1	2
Commons Lane	22	3	0
Field Branch	21	4	2
Sum	69	8	4
% of Total	85.2	9.9	4.9

Question 9
LIKED LOOK OF PACKAGE
(Yes)........................(No)

Point of View	Nice	So-So	Not So Good	Not Sure
Barretts	19	4	1	5
Commons Lane	16	3	1	5
Field Branch	24	2	0	1
Sum	59	9	2	11
% of Total	72.8	11.1	2.5	13.6

from "Pilot Report:
Examining Point
of View" (May,
1972), page 37.

NIE PRODUCT: PERCEIVING SOUND WORD PATTERNS
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional
Educational Laboratory, Inc.)
3120 59th Street
St. Louis, Missouri 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Bennett Tarleton, Product Developer

NARRATIVE DESCRIPTION

This package, part of the Aesthetics and the Creative Process group of the Five Sense Store, introduces students to word patterns as devices used in literature to communicate meaning and feeling. Through the package, students develop an understanding of the properties of three of these literary devices (alliteration, refrain, and rhyme). They show their grasp of these devices by using onomatopoeia to create word patterns and five-word poems which make use of alliteration, refrain, and rhyme. The three poetic devices which are the focus of the package, alliteration, refrain, and rhyme, depend upon repetition for their effect. By perceiving and using these poetic devices, the students understand that they can organize and structure words by repeating them in certain combinations and arrangements.

The package introduces the students to onomatopoeia as an element of literary language. (Throughout the package the term "sound words" has been substituted for "onomatopoeia.") The package provides students with an opportunity to become aware that literature makes a greater use of the sensuous qualities of language than does non-literary language. Unlike the person who uses language primarily to impart information, the writer of literature chooses his words for sound and meaning, using sound as a way of reinforcing his meaning. By introducing sound words as a phenomenon in literature and by dealing with word choice, the package provides the students with some ways of using sound to point to meaning.

Sample Lesson
(Addressed to Teachers)
Lesson 5

Concept: A sound word is a word with sensuous qualities--a word that sounds like what you heard. Sound words are used to enhance meaning.

General Description: The students will work from the sound word to a visual image fitting that word. They will suggest and draw pictures to illustrate sound words both individually and as a large group. They will create a sound poem and record it.

Procedure: Ask the students to think of drawings to go with "beep beep," "bonk bonk," and "bam bam." Ask them what mental image is suggested by each of the sound words. Then you become the class artist and draw pictures from the students' suggestions. Get two or three ideas from the students for each of the sound words. Give the students the following directions for individual work : Tell them to keep their sound words secret until the sharing period. Ten to 15 minutes should be sufficient time for the drawing. On your paper, draw a picture to go with one of these sound words: splash, ahhh, zip, grrr, eeek, pow, tap. Write the sound word on one side of your paper. Draw your sound word picture on the other side of your paper. To share, have each student hold up his drawings and ask the class to guess which sound word is depicted. Then create a sound poem from the sound words. Orchestrate these sound words and record the resulting sound poem.

SUBJECT AREA(S)

Aesthetics and the Creative Process: Language Arts/Literature

Alliteration is the repetition of initial or final consonant or vowel sounds. Used in conjunction with onomatopoeia, alliteration will produce a word pattern in which initial or final consonant or vowel sounds dominate. Refrain is the repetition of sound word patterns at intervals within a poem or song. Rhyme means similar or identical sounds placed in corresponding positions within a word pattern. A simple poem form containing five one-word lines, at least the middle three of which are sound words, can be used to review alliteration, rhyme patterns, and refrain.

INTENDED USERS AND BENEFICIARIES

Perceiving Sound Word Patterns has been designed for use by second-grade students but may be used with older children as well.

GOAL(S) OR PURPOSE(S)

The goals of this package are: 1) to make students aware that sound is used in literary language to communicate meaning and emotion; 2) to bring students to an awareness that onomatopoeia has qualities which stimulate the senses and make us see and hear more keenly; 3) to help students recognize sound words, design visual representations of sound words, and use them in their own oral and written communications; 4) to make students more aware that sound is used in literary language to communicate meaning and emotion and that patterns of sound in literature are created through choosing and arranging words into a variety of word patterns; and 5) to help students recognize alliteration, rhyme and refrain in literary works appropriate to their age.

PATTERNS OF USE

Perceiving Sound Word Patterns is a self-contained set of materials with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in literature, language arts, or creative writing; linked with other AEP packages which are related to literature and writing; or used with other packages in the Aesthetics and the Creative Process group.

ASSESSMENT PROVISIONS

One of the learning games (Sound Word Bingo), which is an activity in the package, is suggested for use as a pre-test. In addition, the Teacher's Guide contains guidelines for assessing the oral and written products of students.

TIME REQUIREMENTS

Perceiving Sound Word Patterns requires approximately five to eight hours to complete, excluding optional activities and follow-up experiences. The time also may be longer if the teacher wishes to spend a good deal of time on sharing the results of the creative thinking and writing periods. There are 10 separate activities, each requiring about 30 to 45 minutes.

IMPLEMENTATION PROCEDURES

Perceiving Sound Word Patterns does not require a specialist teacher. This package has been tested with students in Grade 2 but may be used with older children at the discretion of the teacher or curriculum specialist.

Most of the activities would do well as introductions for various artistic experiences, particularly creative writing. Thus, it may be wise to present the activities in conjunction with regularly scheduled artistic periods or creative writing periods.

The activities require the students to work in a large group led by the teacher, in pairs or in small groups, and individually. Some activities will require rearranging the classroom.

MATERIALS, EQUIPMENT, AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student Materials:				
6 Creating Word Patterns, Zip, Zap, Zoom books	1 set per 6 students		Evaluation sheets are consumable yearly	
1 Investigating the Elements: Sound Words, Abracadabra books		*		
6 Game boards				
1 Pad of sound word story sheets				
1 pad of alliteration sheets				
1 Pad of the word pattern exercise sheets				
1 Pad of sound word sheets				
1 Pad of rhyme sheets				
1 Pad of the refrain exercise sheets				
Teacher Materials:				
Teacher's Guide				
1 Sound Word Bingo bag		*		
2 Sets of sound word stamps				
3 Cassette tapes				

*Prices have not yet been determined.

Summary Cost Information

Depending on classroom organization, units can be purchased in varying multiples of six, e.g., 12-student, 18-student, 24-student sets with teacher materials, etc. Student materials and teacher materials can be purchased separately.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this unit of instruction. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated in its trial use in four separate classrooms of widely varying ethnic and socio-economic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any forms of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review by a qualified expert outside the program. The materials are revised to eliminate any deficiences identified in the review.

Information gathered from the classroom trial indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the

program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information about the utilization of the published version of the package on a yearly basis.

A pre-publication version of the package was tested in grade two classrooms in local schools. Student satisfaction with the package was high and students reported learning from it. Based on teacher and evaluator comments, the package is being revised prior to publication.

AVAILABILITY

Perceiving Sound Word Patterns is copyrighted and is scheduled for publication in late 1975.

The Viking Press/Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

INFORMATION CURRENT AS OF MARCH 1975

Evidence to Support Assurances and Claims for Perceiving Sound Word Patterns

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1972). This source explains in detail the standard procedures followed in the development and evaluation of this product. A hothouse evaluation report was prepared for this package, and describes the results of intensive observation of package activities in a single classroom trial. A pilot evaluation report shows the results of package trial in three different classroom settings. Both hothouse and pilot evaluation reports are completed for Perceiving Sound Word Patterns.

Effectiveness:

Students were asked to compare their feelings about the package with those elicited by the other kinds of work done in class. Only 17% liked the package less than most subjects and 60% liked it better than most subjects (see p. 36, Pilot Report). Students were also asked if they understood the activities. Forty-nine percent said they did so all of the time; 37% reported that they understood the activities most of the time; 3% said some of the time; and 0% said none of the time (see p. 37, Pilot Report).

NIE PRODUCT: RELATING SOUND AND MOVEMENT
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional
Educational Laboratory, Inc.)
3120 59th Street
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Sharon Bocklage, Editorial Coordinator
Dale Hamilton and Linda Slama, Product Developers

NARRATIVE DESCRIPTION

This package, part of the Aesthetics and the Creative Process group of Five Sense Store materials, explores the relationships that exist between sounds and body movements. Looking, listening, moving, making sound--these are ways the primary students experience and learn to differentiate high-low, fast-slow, loud-soft, and strong-weak sounds and movements. Materials to stimulate the exploration--a film, a series of recorded sounds, the Continuum Book--encourage the students to notice the sounds and movements that they see and make daily. Then students work with materials that focus and refine their perceptions--soundmakers, flashlight belts, charts, observation sheets. The concluding lesson presents an expressive filmed example of the fusing of sound and movement, shown not as something for students to copy, but as a summation of awareness arrived at through the package.

This package will encourage students: 1) to explore sound elements by listening to and producing sounds of varying timbres within continuums of high-low (pitch), loud-soft (intensity), and fast-slow (tempo); 2) to explore movement potential within three quantitative dynamics by responding to examples of high-low, fast-slow, and strong-weak movements in a film and in the Continuum Book. Working with their body movements and shadows, they will develop and show at least one example of each of these movements; 3) to explore relationships of sound and movement by matching and contrasting sounds and movements they make; and 4) to integrate the concepts presented in the previous lessons by developing a sound-movement statement that incorporates matching similar sounds and movements and contrasting opposite sounds and movements. They will evaluate their own work and that of their fellow students along with the teacher.

Sample Lesson
(Addressed to Teachers)
Lesson 5

Concept: One way in which sound and movement can be related is to contrast the dynamics of the corresponding elements of the two media.

Objectives: The student will explore a relationship of sound and movement by contrasting sounds and movement. He will make sounds and contrast movements to them. He will make movements and contrast the sounds.

Procedure: Using the Sound and Movement chart, introduce the concept of contrasting. Pair the students. Assign the high-low continuum to begin the contrast exploration. Remind the students of their matching of sounds and movements in Lesson 4, and point out that contrasting is another way that sounds and movements can be related. Using the chart, help them understand that to contrast in this context means to convey a sound quality that is opposite to a movement quality.

Decide which of the pair is the mover and which is the soundmaker. Soundmaker makes a high sound. Mover responds with a low movement. Then soundmaker makes a low sound, and mover responds with a high movement. Switch order: mover moves and soundmaker responds. Switch roles: mover becomes soundmaker and vice versa. Any verbalization of what the mover means to show by his movement or what quality the soundmaker means his sound to convey should be discouraged. Rather, encourage them to tune in to their partners by watching and listening. Some pairs of students tend to repeat the same kinds of sounds and movements. A switch in partners at any time in the exploration could stimulate new thinking about how to move and make sounds.

Invite students to evaluate their explorations with responses to such questions as: "Which contrast was most difficult for you? Why do you think so?"

Work first with the fast-slow continuum and then with the loud-soft/strong-weak continuum. Have student pairs show their contrasts to one another. The performance of successful work can stimulate other students who have difficulty finding or contrasting the sounds or movements.

SUBJECT AREA(S)

Aesthetics and the Creative Process: Dance-Music

Exploring and experiencing continuums within pitch, tempo, and amount of intensity in sound; exploring and experiencing continuums within amount of space, amount of time, and amount of force in movement; exploration of the sound-movement relationship by matching and contrasting; the process of developing a sound-movement statement that incorporates matching similar sounds and movements and contrasting opposite sounds and movements.

INTENDED USERS AND BENEFICIARIES

Relating Sound and Movement is designed primarily for second-grade students. It can be used at the discretion of the teacher, however, with first or third-grade students.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package is to increase a student's capacity to experience a dance-music event by refining the student's ability to differentiate among high-low, fast-slow, loud-soft/strong-weak sounds and movements and to perceive several possible relationships between sound and movement.

PATTERNS OF USE

Relating Sound and Movement is a self-contained unit of instruction with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in dance or music; linked with other music- or dance-based packages developed by the Aesthetic Education Program to form a curriculum; or linked with other AEP packages which are related to art, literature, theatre, and film and which are clustered around "Aesthetics and the Creative Process."

ASSESSMENT PROVISIONS

Two pre-tests, one asking students to discriminate among sounds and another dealing with the ability to discriminate movement, serve as the first two activities. These can also be used as post-tests. Teachers and students assess learning based on student activities and oral responses. Guidelines for the assessment are in the Teacher's Guide.

TIME REQUIREMENTS

The activities in Relating Sound and Movement require from 8 to 10 hours to complete, depending upon the way in which the teacher chooses to structure them.

IMPLEMENTATION PROCEDURES

Relating Sound and Movement does not require a specialist dance or music teacher. It is recommended that it be taught in a number of small groups working independently, rather than in one large group. It would also be possible to allow individual students to work independently on certain activities. Thoughtful exploration and self-evaluation by the students is encouraged throughout this package.

Field reports indicate that the materials stand up well with repeated use. Consumables are minimal and are easily purchased from the publisher.

MATERIALS, EQUIPMENT AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Costs Per Item	Replacement Rate	Source if Different from Distributor
Student Materials: 6 flashlights with belts 2 pads of sound pre-test sheets (30 sheets in each pad) 2 pads of movement pre-test sheets (30 sheets in each pad) 2 pads of observation sheets for evaluation (30 sheets in each pad)	1 set per 6 students (at one time)	$29.00*	Pre-test and evaluation sheets consumable yearly or after five uses	
Teacher Materials: Teacher Guide 16mm pre-test sound color film 16mm "Fogarty Park" sound color film 12" LP disc record Double-faced wall chart Book of photos		$116.00*		

*Price subject to change

Summary Cost Information

Packages can be purchased in varying multiples of six, for example, 12-student, 18-student, or 24-student sets. Student and teacher materials can be purchased separately, so that only one set of teacher materials need be purchased iwth two, three, four or five student sets. Cost for one complete unit containing enough materials for one teacher and six students is $145.00.

Personnel Required for Product Adoption and Implementation

The classroom teacher without special training in music or dance can implement this instructional package. Workshops are offered by the publisher and by CEMREL, Inc. Curriculum consultation is also available from CEMREL, Inc. Cost for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socio-economic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eleminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information on a yearly basis.

A pre-publication version of the package was tested with two third grade classes in one racially and economically mixed local school. A questionnaire administered before and after the use of the package indicated that students were improved in their ability to recognize and name the characteristics of movement.

AVAILABILITY

Relating Sound and Movement is currently available from the publisher. Product carries a 1973 copyright date, and copyright is claimed until 1981.

The Viking Press/Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

INFORMATION CURRENT AS OF MARCH 1975

Evidence to Support Assurances and Claims for Relating Sound and Movement

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1972). This source explains in detail the standard procedures followed in the development and evaluation of this product. A hothouse evaluation report was prepared for this package, and describes the results of intensive observation of package activities in a single classroom trial. A pilot evaluation report shows the results of package trial in three different classroom settings. Both hothouse and pilot evaluation reports on Relating Sound and Movement are complete. An Overview of Development and Evaluation of the Five Sense Store (Edwards, 1974) explains the procedure through which the Program continues to gather information on products currently being used in the field.

Effectiveness:

A questionnaire was designed for the purpose of comparing the two classes in several areas of interests:

1) In the media of sound: the ability to perceive cognitively the main characteristic of a sound-music example. (A representative item is: "The whole piece was played about the same loudness" --yes, no, or I don't know.)

2) In the media of movement:

   a) the ability to perceive cognitively the main characteristic of a movement example. (A representative item is: "I would describe her as looking strong rather than weak"--yes, no, or I don't know.)

   b) the degree of kinesthetic reaction occurring while perceiving a movement example. (Representative item: "I could sense her weight falling from one foot to another"—yes, no, or I don't know.)

   c) the degree of positive attitudes toward movement in general. (Representative item: "I think it is fun to try to move the body like that"--yes, no, or I don't know.)

There are two movement examples and two sound examples. After viewing or attending to each example, the students were asked to answer 20 questions each pertaining to one of the areas described above. The items of different nature were mixed together to enhance reliability of answers. The questions were read by the teacher item by item to alleviate reading problems.

Except for a few occasions where certain words were further explained by the teacher, the administration of questionnaires encountered no problems. The students were attentive. The entire process took 30 minutes.

Following are the scores of class averages.

	MOVEMENT		Class L	Class B
	Cognition of movement characteristic	post:	10.85	8.08
C:	(possible maximum score: 14)	pre:	4.54	3.75

	SOUND		Class L	Class B
	Cognition of sound characteristics	post:	11.47	9.42
C:	(possible maximum score: 19)	pre:	8.05	8.00

Post-pilot field trials were conducted on this package. Of the teachers involved, 100% said they would recommend the package to other teacher, and 88% said their students were excited about or looked forward to each lesson (see Aesthetic Education Program Extended Pilot in Pennsylvania, Appendix A, page IX, June, 1973).

NIE PRODUCT: CREATING WITH SOUNDS AND IMAGES
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional
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3120 59th Street
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Sharon Bocklage, Editorial Coordinator
Rene Michel-Trapaga, Product Developer

NARRATIVE DESCRIPTION

This package, part of the Aesthetics and the Creative Process group of the Five Sense Store, helps students become aware of various means of communication. Through the use of drawings, photographs and slides, students learn how images communicate without the use of words. This concept is expanded as the images are matched with sounds. Students explore the importance of sequencing images and sounds by creating part or all of an image sequence. Further, they create their own images, sounds, and narration to make a total presentation.

This package encourages students to 1) participate in our image and sound-laden society with greater awareness of image/sound communication; 2) evaluate the effectiveness of communications; and 3) be able to communicate their own thoughts and feelings with images and sounds.

Sample Lesson
(Addressed to Teachers)
Lesson 3

General Description: The students learn the meaning of the word "image." Then they examine a set of photographs to find images that convey specific images.

Procedure: Divide the students into small groups and give each group a set of photographs that are provided in the package.

Explain that you will give them some problems which they will solve by selecting photographs. Begin with one problem as an example:

> "Find an image that shows a sad person. Look through your photographs and find one that shows someone looking very sad."

The students may not all choose the same photograph as the solution to a particular problem. Do not say that there is any one correct answer, but do ask the students to give a reason for their selections. Say, "What is it about that person that looks sad to you, Luther? Do you agree, Maria? Did you pick the same image?"

Start the students on the problems having the most concrete solutions. Only when the students seem very much to have the idea, should you move into those with less concrete and less familiar solutions. Here are a number of problems you can use. You may think of some others you like and feel are suited to your class.

Find an image that shows you how to make something.
Find an image in which someone is angry, (happy, sad, etc.).
Find an image that tells you how something is put together. How can you tell?
Find an image that shows something you might see in a dream.
Find an image that makes you feel sad, happy, angry. What shows you that?
Find an image that shows you something very exciting. Why do you think that's exciting?

It is important that your students give reasons why they identify certain images as being sad, happy, building something, etc. It is not so important that everyone agrees with the particular reasons.

Finish the activity by asking the students what they discovered from solving the problems you gave them. They should say (in their own words) that images communicate, that each of the pictures told them something. If none of the students say this, or if there does not seem to be a general understanding of the concept, be very specific in pointing it out. You might say, "This picture tells us...this image shows...in a way different from words, that we get messages from images, messages about things that are not right in front of us."

SUBJECT AREA(S)

Aesthetics and the Creative Process: Visual Arts/Music/Communications/Language Arts

Images and sounds communicate. A sequence of images and sounds can present a more extensive communication than a single image or sound. The meaning of a single image changes when it becomes part of a sequence or when there is a change in the order of images within a sequence.

INTENDED USERS AND BENEFICIARIES

Creating with Sounds and Images has been tested with second- and third-grade children, but beginning second graders found the package difficult to master. The materials work best with third and fourth graders and older children.

GOAL(S) OR PURPOSE(S)

The purposes of this set of materials are to teach students 1) that images and sounds communicate; 2) that more complex and detailed communications require a number of images and sounds; 3) that the meaning of a sequence changes if there is a change in the order of its images; 4) that timing plays an important part in putting images and sounds together; and 5) that there are many elements involved in communicating with images and sounds.

PATTERNS OF USE

Creating with Sounds and Images is a self-contained unit of instruction with activities that are sequential and cumulative. It may be used as part of an elementary art curriculum, a language arts curriculum, or a communications curriculum; linked with other AEP packages in the Aesthetics and the Creative Process group, especially the Constructing Dramatic Plot package; and used to develop group process skills.

ASSESSMENT PROVISIONS

Informal assessment provisions are interspersed throughout the activities. Learning is assessed by teacher and student. Guidelines to aid the teacher in assessing student performance are built into the package. Storyboard response sheets provide a structure for assessment of student work, and the package's culminating activity provides a setting for the assessment of overall effectiveness.

TIME REQUIREMENTS

Creating with Sounds and Images requires approximately 15 hours to complete, depending on class size and utilization of suggested additional activities. Daily allotted time varies from 15 minutes to 45 minutes per activity. The package takes about 25 days to complete.

IMPLEMENTATION PROCEDURES

Creating with Sounds and Images does not require a specialist teacher. This package has been tested with students in grades two and three, but may be used with older students. It is recommended that it be taught in small groups to enhance interaction and allow the teacher to respond specifically to each student.

Field reports indicate that the package demands a basic social maturity in the students if the group experiences are to be productive, but on the whole the package was well-received and was rated as excellent for its concepts and activities.

MATERIALS, EQUIPMENT, AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student Materials:				
24 slide mounts	6 per student	*	Storyboard pads and acetate pads are consumable yearly.	
2 pads of acetate for making slides	3 sheets per student			
1 pad of storyboard sheets				
4 sets of Photograph A				
1 set of Photograph B				
10 sets of black & white photographs				
Storycards				
Teacher Materials:				
Teacher's Guide				
1 Sound filmstrip				
1 Sound effects tape				
1 Music tape				
1 set of abstract slides				
1 set of environment slides				
1 set of animation slides				
1 slide sorter				

*Prices have not yet been determined.

Personnel Required for Product Adoption and Implementation

The classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher and by CEMREL, Inc. Curriculum consultation is also available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information on utilization of published materials on a yearly basis.

The pre-publication evaluation of this package was carried out with second and third grade students in local schools. Special instruments of measurement were developed to assess the outcomes of instruction with the materials. These instruments revealed that students working with package materials earned statistically-significant higher scores than control group students on measures of technical vocabulary. Students using the package scored significantly higher than others on a performance measure of ability to communicate by using a synthesis of sounds, images, and narration. This information supports a claim of package effectiveness. Student satisfaction with the materials was indicated by their responses to two preference scales. Teacher satisfaction was indicated by responses to an imbedded questionnaire and a terminal questionnaire and interview. Two outside experts reviewed the content of prototype materials and responded favorably.

AVAILABILITY

The anticipated completion date of Creating with Sounds and Images is November 1975. The package is copyrighted.

INFORMATION CURRENT AS OF MARCH 1975

and narration to communicate a story of their own devising. The conditions under which students performed the task were carefully standardized. Two judges independently scored the papers without knowledge of treatment or control group membership. The written directions that were given to judges are reproduced in Appendix B of the Pilot Report. There was a high degree of agreement between the two judges as evidenced by a .972 correlation between their scores. Tables 1, 4, and 5 of the Pilot Report show the results and analysis of the SINC Task. Test materials are reproduced in Appendix B of the Pilot Report. A two-way analysis of covariance was performed, contrasting treated and untreated students. Students who had worked with the materials scored higher than others at the .0001 level of significance. Once more there was an interaction effect, significant at the .05 level, and the hypothesis of control group contamination was proposed as an explanation for this effect. It was concluded that Creating with Sounds and Images was highly effective in teaching the skills measured by the SINC Task. Because of its relevance to so many package concepts, the SINC Task was considered the most important instrument in the pilot level evaluation.

Claims of product effectiveness are also supported by the results of unscheduled spot observation of classroom process while the package was being taught. Activities were observed at the pilot test stage approximately twice each week at each test site. Information gathered through classroom observation is discussed on pages 41 through 48 of the Pilot Report.

Review by Outside Experts:

Prototype (hothouse) materials for Creating with Sounds and Images were reviewed by two subject matter experts, who prepared written critiques including suggestions for revision. The critiques appear on pages 33 through 37 of the Pilot Report.

Student Satisfaction:

Claims of student satisfaction with Creating with Sounds and Images are supported by results of the Package/Subject Preference Scale (PSPS), a measure administered to treated students after conclusion of the pilot trial. The PSPS, which is reproduced along with directions to students in Appendix D of the Pilot Report, called upon students to take a position with regard to paired comparisons of the package with all the other subjects studied by the pilot classes. The PSPS yielded ipsative scores showing how well the package was liked in comparison to every other school subject. Tables 10 through 12 in the Pilot Report show each class's responses to the PSPS, and the responses of the pooled classes. When the treatment classes were pooled for analysis, it was found that the package was favored in 8 out of 11 (or 73 percent) of the comparisons.

An Activity Preference Scale (APS) was developed for the evaluation of Creating with Sounds and Images. The APS, which is reproduced along directions to students in Appendix C of the Pilot Report, called upon students to assign one of three possible ratings to a package activity. The three ratings, which were identified by a cartoon style drawing of a frowning, neutral, or smiling child, indicated dislike, neutrality, or liking for a specified activity.

Tables 6 through 8 of the Pilot Report show each class's responses to the APS, and the responses of the pooled classes. Of the 12 activities surveyed, 11 (or 91.7 percent) were liked by a majority of the students.

Student satisfaction was also noted in classroom observations and reports from the teachers.

Teacher Satisfaction:

Claims of teacher satisfaction are supported by observations of classroom process, responses to a questionnaire imbedded within the Teacher's Guide, responses to a questionnaire administered at completion of the pilot test, and responses to a final teacher interview. The teachers who worked with the package were quite favorable toward it, and their responses are discussed in detail on pages 49 through 61 of the Pilot Report.

NIE PRODUCT: ANALYZING CHARACTERIZATION
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional
Educational Laboratory, Inc.)
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Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Bennett Tarleton, Product Developer

NARRATIVE DESCRIPTION

This package, part of the Aesthetics and the Creative Process group of the Five Sense Store, helps students to verbalize more descriptively their perceptions regarding people. Further, they realize that graphic descriptions of real people can also be applied to fictional people; this makes stories and plays more enjoyable and appealing.

The students apply words which classify attributes of characterization in terms of sex, age, role or occupation, actions, speech, and feeling to the stimuli supplied in the package (photographs, oral statements, reading passages) and to their own creative products (drawings, improvisations, writings, and storytellings). It is hoped that by working with characterization in a number of disciplines, the students will observe that the ability to handle perceptions of this sort leads to greater understanding of people and "characters" within the spectrum of the environment and the various arts.

Sample Lesson
(Addressed to Teachers)
Lesson 1

Concept: With words we indicate such perceptions regarding a person as sex, age, role, actions, speech, and feelings.

Objective: The students will become familiar with and begin to recognize some typical characterization words. In this lesson they will work with person words (or nouns).

Procedure: Distribute the student booklet People Are, People Do, People Feel. Use the pages beginning "Do you know these person words?" (page 10) as the basis for a class discussion. Add your own questions to those given below. Because you know the children well, you will be able to personalize the questions.

1. Do you know a policeman, a mother, a friend?
2. Has a fireman ever come to your house or to your school?
3. What is a friend like?
4. Do you know a woman who is a doctor?
5. Can a person be more than one thing at the same time?

A doctor and a father?
A brother and a boy and a friend?

After the students have begun to answer the questions, give a deck of Person Cards to each student. Tell the students that the words on the cards are the same person words listed on page 10 of their books. The words are also listed here.

man
woman
boy
girl
father
mother
grandfather
grandmother
brother
sister
friend
neighbor
policeman
fireman
doctor
teacher
astronaut
janitor
waitress
salesman

Select a word, write it on the chalkboard, and ask a student to give you his or her impressions of the word. Elicit the students' impressions with questions such as these:

"Can a teacher be a mother?"
"How is a man different from a neighbor?"
"How is a brother different from a friend?"

As this is not a vocabulary lesson per se, strive for general understanding of the word rather than a dictionary definition. Move quickly through several words.

Focus the attention of the class on the words as used in relation to real or imaginary people. Try to help the students become aware of a person being many things at one time.

Now have the children draw pictures to illustrate their person words. Have them follow the directions in their booklets. The directions are also listed here.

Choose a person word.
Do not tell anyone what your person word is.

Write your person word on one side of your
drawing paper.
Draw a person picture on the other side.
Make a person larger than everything else.
Make the person more colorful than everything
else.
Draw things the person might use.
You may fill your whole drawing sheet.
When you finish your person picture, have
your friends quess which person word
you chose.

Tell the students that they should make the person indicated by the word they are drawing the most important element in the drawing--put things the person might use into the drawing--make the person larger and more colorful than anything else. Or they should fill the entire drawing paper with the face of the person word, i.e., draw a portrait of the person.

After the drawing period, ask several students to share their drawings with their classmates by holding up their pictures. The other students should guess which word has been drawn. Although some drawings may be obvious (doctor, teacher, fireman), others may produce several correct responses. Discuss with the students whether one word is a better label than another for what is characterized in the drawing. If possible, put all the drawings on display in the classroom.

SUBJECT AREAS

Aesthetics and the Creative Process: Language Arts/Literature

Words are a means of classifying and interpreting perceptions regarding people. Human characteristics as identified in photographs may be expressed by means of specific words. Some words are more specific and descriptive than others. Literature is not something created only by professional writers; literature may be created by a child using words to convey his thoughts and feelings about himself and other people.

INTENDED USERS AND BENEFICIARIES

Although designed primarily for second-grade students, Analyzing Characterization would be successful with third and fourth graders as well.

GOAL(S) OR PURPOSE(S)

The purpose of this package is 1) to introduce students to characterization as a phenomenon in the environment and the arts; 2) to expose students to the properties of a character's sex, age, role or occupation, actions, speech, and feelings; and 3) to help students transfer their perceptions of character from one artistic medium to others.

PATTERNS OF USE

Analyzing Characterization is a self-contained package with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in literature or language arts; linked with other AEP materials in the Aesthetics and the Creative Process group and with other AEP packages related to character study, creative writing, or literature; and used with traditional English programs in teaching grammar and composition.

ASSESSMENT PROVISIONS

While there are no formal tests, learning is assessed by teacher and student. The first and last activities can be used as pre- and post-tests. Guidelines for assessing student performance and oral response are built into the package.

TIME REQUIREMENTS

Analyzing Characterization requires approximately 10 to 15 hours to complete depending on class size and the utilization of suggested optional and follow-up activities. There are eleven distinct activities and require an average of 30 to 45 minutes each.

IMPLEMENTATION PROCEDURES

Analyzing Characterization does not require a specialist teacher. This package has been tested with students in grade 2, but may be used with older children at the discretion of the teacher or curriculum specialist. The various activities in the package require students to work in large groups, in small groups, in pairs, and individually. Some of the activities require rearranging the classroom, and the improvisation activities will require space for meetings, practice, and performing.

Most of the activities serve as introductions for various artistic experiences. Therefore, the teacher is encouraged to present the activities in conjunction with regularly scheduled artistic periods. The materials may be used as stimuli for picture making, dramatic improvisation, and storytelling.

MATERIALS, EQUIPMENT, AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student Materials:				
6 People Are, People Do, People Feel books	1 set per 6 students	Not yet determined		
6 Queens, Kids, and Other People books				
6 Sets of word cards (58 cards per set)				
Teacher Materials:				
2 Cassette tapes				
1 Teacher's Guide				

Summary Cost Information

Depending on classroom organization, units can be purchased in varying multiples of six, e.g., 12-student, 18-student, 24-student sets with teacher materials, etc. Student materials and teacher materials can be purchased separately. Costs are figured on multiples of the base price per six-student-and-teacher module. The cost for one unit has not yet been determined.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this unit of instruction. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of varying ethnic and socio-economic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trials indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information on a yearly basis.

The pilot evaluation of this package was carried out with grade 2 students in local schools. Specially constructed tests indicate that students who received package instruction were more able to analyze characterization than students who were not taught the package, to a moderate degree. Student and teacher satisfaction with the package was high as measured by post-treatment questionnaires.

AVAILABILITY

The anticipated completion date of Analyzing Characterization is late in 1975. The package is copyrighted.

INFORMATION CURRENT AS OF MARCH 1975

Evidence to Support Assurances and Claims for Analyzing Characterization

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1972). This source explains in detail the standard procedures followed in the development and evaluation of this product. A hothouse evaluation report was prepared for this package, and describes the results of intensive observation of package activities in a single classroom trial. A pilot evaluation report shows the results of package trial in three different classroom settings. Both hothouse and pilot evaluation reports are available from CEMREL.

Analysis of Characterization:

Second-grade students from a variety of socio-economic levels were asked to write a description (characterization) based on a stimulus photograph selected from a set of four displayed on an assigned photoboard. Four different types of photoboards were used, each with a different category of person in regard to sex and age, indexed as follows: (A) Man, (B) Boy, (C) Girl, (D) Woman. The photoboards were assigned randomly to the students so that individual preferences for sex and/or age would not correlate with their choice of photoboards, and thus spuriously inflate the scorer's guessing percentages.

The students were regrouped so that each of the four groups could conveniently look at the two photoboards of each type which were provided. After students were assigned the photoboards they were told to each select any one of the four photos on their board and write a description of the person in the photo, pretending they were that person. That is, each student was told to write in the first person, using such pronouns as I, me, and my. Each class usually had about 20 minutes to a half hour to write their characterizations depending on the total time provided for testing and the time needed for administration of Activity 1 and for setting up Activity 2. A cross-section of five students was selected from each class to have their characterizations taped. They were allowed--even encouraged--to elaborate their characterizations, but almost all students elected simply to read aloud what they had written.

Discussion of Results:

This activity produced moderate differences between treatment and control groups. The students were scored both by number right and and by weighted scores. The treatment students tended to choose the second-best answer relatively more frequently than the control groups when they did not pick the correct response, and the use of weighted responses improved the statistical significance of the difference between the two groups. The number right means missed significance at the .05 level (t = 1.72, where t.05 = 1.98 with 78d.f., one tailed test) while the weighted scores showed significance at the .01 level (t = 3.62, where t.01 = 2.60 with 78d.f.).

Student Satisfaction:

Based on pilot version of the package, students responded to a questionnaire administered orally. The results are summarized in Table 1 of the Pilot Report. In responding to the questionnaire, 84.6 percent of the students said they were happy with the package, and would like to work with another package like this one.

Teacher Satisfaction:

Teachers who taught a pilot version of the package responded to a questionnaire. The questionnaire with the results tabulated is reproduced as Appendix B of the Pilot Report. All teachers who taught the package at pilot level stated that they would recommend the package to other teachers.

NIE PRODUCT: CREATING WORD PICTURES
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory, Inc.)
3120 59th Street
St. Louis, Missouri 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Rita Perkinson, Product Developer

NARRATIVE DESCRIPTION

A part of the third series of Five Sense Store packages, Aesthetics and the Creative Process, this package encourages students to explore the English language as a tool for effective and imaginative communication, both oral and written. Each student has a Word Book, a comic-book style guide that explains concepts, directs activities, and reinforces learning. It is used in combination with a diagnostic activity, recording sheets, a set of word cards, a word card sheet, and the "What is...?" Game--materials that allow the student to progress toward imaginative and effective communication at his own rate.

This package will encourage students: 1) to describe verbally the sensuous connotations of words they select; 2) to manipulate the blue word cards, combining two words to produce specific, original, or humorous images; 3) to recognize that the word picture made by two words can be changed by transposing them. They will describe their sensuous perception of both word pictures through written or verbal means, and by making related drawings; 4) to create their own word pictures with the word cards; 5) to select words to find various answers that correspond to the sensuous properties of the definitions given on the "What is...?" Game cards; 6) to manipulate word cards, changing the subject to effect major changes in their word pictures, and changing verbs and modifiers to make minor changes; and 7) to demonstrate that they can use words creatively to communicate thoughts effectively by using the word cards to construct complete thoughts and sentences; by discussing the sensuous properties of the words they use; and by experimenting with word combinations until reaching one they find acceptable.

Sample Lesson
(Addressed to Teachers)
Activity 9

Concept: Words are symbols that are used to communicate ideas.

Objectives: The student will demonstrate that he can use words creatively to communicate thoughts effectively:

1. by using the word cards to construct complete thought;
2. by using the word cards to construct complete sentences;
3. by discussing the sensuous properties of the words he uses;
4. by experimenting with word combinations until reaching one he finds acceptable.

Encourage students to keep a written record of their work. (Successful examples of each numbered objective listed above follow.) To evaluate the students' work, be familiar with the guidelines below and with the general criteria on pages 9-12. In observing their work, in talking with them about their work, and in reading what they produce, emphasize specificity and originality to the students.

1. The student should be encouraged to construct complete thoughts. Students should be allowed to use the words that they "need" even though the words do not appear on any of the word cards. At the same time, they should be aware of the possibilities and flexibility of the words already included.

Allow the students as much time as they need to complete their work. For example, one student worked for thirty minutes and wrote one statement: "flower i love you."

2. The student should begin to use sentences to express a thing. Building clauses and phrases can be a preliminary necessity and is a verbal activity in itself.

> crawl like a spinning jump; a gallop in the winter like a jump; ancient will happen; sleepy in the day will frighten you

While these are not complete statements, they do indicate a probing and a discovery. Examples: I "cam" ancient; ugly black winter; and black lady is weak; when I come; is rusty weak black sleep alone.

3. The student should be able to discuss with his teacher and classmates the sensuous properties determined through a choice of words. Example:

> Once an old empty ancient submarine ship was quiet and rusty in Germany. Inside the ancient submarine ship "was" a million sticky spiders. An old sleepy Indian spider. He thought it was a nice home. Because it was quiet. He liked quiet places. Because he was very very old. He was so sleepy he went back to sleep. The old empty ancient submarine was "know" again quiet.

4. The student should experiment with possibilities of arrangement. Examples of student combinations:

An elephant and I laugh in the closet.
An old elephant and I laugh and crawl in the closet.
The old electric bridge will come and go.
The old electric bridge will come in winter and go in
spring.

SUBJECT AREA(S)

Aesthetics and the Creative Process: Communication Arts/Literature

Words are symbols that can be used to communicate sensuous characteristics and ideas; precise images or thoughts can be communicated by carefully choosing and arranging words; altering words used as modifiers of something will alter the sensuous perception of that thing.

INTENDED USERS AND BENEFICIARIES

Creating Word Pictures is designed for second, third, and fourth grade students.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package is to enable students to increase their ability to communicate effectively and imaginatively in the English language, both orally in and in writing by: (a) creating novel word combinations; (c) describing the connotations of words; and (c) drawing specific and meaningful analogies.

PATTERNS OF USE

Creating Word Pictures is a self-contained unit of instruction with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in literature; linked with other AEP units which are related to music, art, dance, and drama and which are clustered around "Aesthetics and the Creative Process"; or used with language arts programs.

ASSESSMENT PROVISIONS

Guidelines for informal assessment procedures are provided in the Teacher's Guide. The relevant criteria for evaluating a particular activity are listed in the notes for the activity. As each student moves through an activity his progress is recorded on a "Record of Activities" sheet. A diagnostic pre-test activity is provided to find the entrance level of competency of each student.

TIME REQUIREMENTS

Creating Word Pictures takes approximately nine hours to complete, depending upon the number of students a teacher has and whether or not she divides them into groups when working with the package. The various activities within the package require from 15 to 45 minutes.

IMPLEMENTATION PROCEDURES

Creating Word Pictures does not require a specialist teacher. This instructional package has been tested with students in grades two, three and four but may be used with older students at the discretion of the teacher. There are various possibilities for structuring the activities in this package. The teacher may instruct the whole group on what to do and then allow smaller groups of three students to work at various times. Or the teacher may set aside a specific time in which the whole group will work on the instructions and activities. Or she/he may let individual students or small groups work independently with the materials and proceed at their own pace.

The teacher is encouraged to extend the concepts in this package to the analysis of and/or the writing of poetry.

MATERIALS, EQUIPMENT AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student Materials:				
6 Word Books		$56.00*	Diagnostic activity sheets and worksheets consumable yearly	
2 boxes of word cards	1 set per 6 students			
2 What Is? games				
6 Word card sheets				
4 pads of diagnostic activity sheets				
6 pads of individual worksheets				
Teacher Materials:				
Teacher Guide		$3.95*		

*Prices subject to change

Summary Cost Information

Packages can be purchased in varying multiples of six, for example, 12-student, 18-student, or 24-student sets. Student and teacher materials can be purchased separately, so that only one set of teacher materials need be purchased with two, three, four or five student sets. Cost for one complete unit containing enough materials for one teacher and six students is $59.95.

Personnel Required for Product Adoption and Implementation

The classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher and by CEMREL, Inc. Curriculum consultation is also available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of varying ethnic and socio-economic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package.

After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information on the utilization of the published version of the packages on a yearly basis.

The pre-publication evaluation of this package was carried out with grade three students in local schools. A specially constructed test indicates that students who received package instruction were more able to write descriptions using a given stimulus than students who were not taught the package, to a moderate degree. Student and teacher satisfaction with the package was high as measured by post-treatment questionnaires.

AVAILABILITY

Creating Word Pictures is currently available from the publisher. Product carries a 1973 copyright date, and copyright is claimed until 1981.

The Viking Press/Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

INFORMATION CURRENT AS OF MARCH 1975

Evidence to Support Assurances and Claims for Creating Word Pictures

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1972). This source explains in detail the standard procedures followed in the development and evaluation of this product. A hothouse evaluation report was prepared for this package, and describes the results of intensive observation of package activities in a single classroom trial. A pilot evaluation report shows the results of package trial in three different classroom settings. Both hothouse and pilot evaluation reports have been completed on this product. An Overview of Development and Evaluation of the Five Sense Store (Edwards, 1974) explains the procedure through which the Program continues to gather information on products which have passed the pilot stage of evaluation.

At the pilot trial third-grade students from a variety of socio-economic levels were asked to write out three different descriptions using a given stimulus word and sense modality. Each response was judged against two criteria:

1. Does the response address itself to the sense modalities specified for the item. If not the response is discounted.

2. Those responses which meet criterion 1 were then classified into one of four categories. The test group scored higher on one of the four categories. The gain factor of test 1 was significant at .001 level (Kunkel, 1972 p. 9).

Student Satisfaction:

The students were administered a questionnaire orally. The results are summarized on p. 9 of "Summaries of the First Eleven Pilot Studies in the Aesthetic Education Program," (Kunkel, 1972). In responding to the questionnaire all of the students felt good or very good about the package. Over 90% indicated the desire to do the package a second time. Over three-fourths of the students felt they learned very much.

Teacher Satisfaction:

Post-pilot field trials were conducted on Creating Word Pictures. Of the teachers involved, 89% said they would recommend the package to other teachers, and 85% said their students were excited about or looked forward to each lesson (see Aesthetic Education Program Extended Pilot in Pennsylvania, Appendix A, page IX, June, 1973).

NIE PRODUCT: CONSTRUCTING DRAMATIC PLOT
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory, Inc.)
3120 59th Street
St. Louis, Missouri 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Sharon Bocklage, Editorial Coordinator
Bernard S. Rosenblatt, Associate Director and Product Developer

NARRATIVE DESCRIPTION

A part of the third series of the Five Sense Store packages, Aesthetics and the Creative Process, Constructing Dramatic Plot is designed as a series of three games, each posing specific problems. By selecting and arranging the elements of dramatic plot structure--characters, setting, incidents, conflict, crisis, and resolution--the students solve the problems and begin to see how a playwright uses these elements to achieve unity in a play and create heightened interest in the audience. Colorful game boards and rules sheets for each of the three games are used with card decks presenting specific examples of each of the elements. An incident card might read "Someone surprises someone else (how?)," and a student incorporates this into a plot about, for example, a birthday party. Diagnostic activities precede the games and can be used to guide students to the most appropriate beginning game level. Groups of three students play the games together.

This package will encourage students 1) to use card decks to select characters and setting and to link a series of incidents to create a simple but logical story (Game 1); 2) to use card decks to create a simple but logical story with characters, setting, a conflict, and incidents (Game 2); 3) to use card decks to create a simple but logical plot with characters, a setting, conflict, incidents, a crisis, and a resolution (Game 3); and 4) to act out their dramatic plots.

Sample Lesson
(Addressed to Teachers)

GAME 1

Concepts: A dramatic plot begins to be developed by linking a series of incidents. A dramatic story includes characters and a setting.

Objectives: The student will use a card deck to select characters and a setting for a dramatic story. The student will use a card deck to select and link a series of incidents to create a simple but logical story.

GAME 1: RULES (Addressed to Students)

Aim of the Game

This is a game in which the players work together to make up the best possible dramatic story. You will use character-setting cards, the incident cards, and imagination cards to make up your story. All the cards must make sense together.

1. One, two, or three may play.
2. Set up the game board with the character-setting card deck, incident card deck, and the imagination card deck.
3. Choose any one of the character-setting cards for your story from the character-setting card deck. All players must agree on the card. Put the card face-up on the top of the deck.
4. Decide who goes first, second, and third.
5. Player one chooses any one of the incident cards to start the story. Place the incident card on the first space on the game strip. All the players must agree with your choice.
6. Player two does the same, but places his incident card on the next blank space on the game strip. All the players must agree with your choice.
7. Player three does the same thing. All the players must agree with your choice.

Special Rules

1. The incidents in the story must make sense together.
2. The incidents must make sense with the characters and setting.
3. All the players must agree that the incidents, characters, and setting make sense together.
4. If you cannot make an incident card fit into the story, you may use an imagination card and make up your own incident.

5. When you have finished a story, show it to your teacher and answer these questions:

Who are the characters in your story?
What is the setting for your story?
What are the incidents in your story?

If your answers are correct, your teacher will tell you what game to play next.

Try one of the "For Fun" ideas!

Explanation

Here is an example of a simple dramatic plot.

Incidents

Characters Setting

Aram and Neal go into a cave.
The cave is very dark and quiet.
Aram wants to explore the dave but
Neal gets scared and wants to leave.
They hear a loud rumbling noise outside.
A rock slide blocks the cave entrance!
Aram and Neal start pulling the rocks away.
A large rock is still in the way.
They pry it loose with a big stick.
They unblock the cave entrance and go outside.

A dramatic plot is a story that has characters, a setting, and incidents.
Can you imagine what the setting looks like in the story about Aram and Neal?
Can you describe it?
Can you describe what Aram and Neal look like? What are they wearing?
Can you imagine the incidents happening?
What are characters?
What is a setting?
What are incidents?

characters	Dramatic plot characters are people in the play story.
setting	A dramatic plot setting is where the play story happens.
incidents	Dramatic plot incidents are things that happen in a play story.

Try These for Fun

Act out your dramatic story.
Write your own story by making up your own setting, characters, and incidents.
Make a picture or a model of your setting.
Share your story with some friends.

SUBJECT AREA(S)

Aesthetics and the Creative Process: Theatre Arts

Introduction of the term "dramatic plot" and how it functions in a dramatic structure; process of selecting and arranging the elements of dramatic plot--incidents, setting, characters, conflict, crisis, and resolution--into a story.

INTENDED USERS AND BENEFICIARIES

Constructing Dramatic Plot was tested with third graders but may be used with older or younger students at the discretion of the teacher.

GOAL(S) OR PURPOSE(S)

The purposes of this instructional package are to 1) lead students to an understanding of dramatic plot structure by having them manipulate the elements of dramatic plot in the development of their own plots and thereby 2) begin to see how a playwright uses these elements to achieve unity in a play and create heightened interested in the audience.

PATTERNS OF USE

Constructing Dramatic Plot is a self-contained unit of instruction with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in drama; linked with other AEP packages which are related to music, art, dance, and literature and which are clustered around "Aesthetics and the Creative Process"; and used with language arts programs.

ASSESSMENT PROVISIONS

A student progress chart can be used as a guide for establishing a record-keeping system for students' work. Two diagnostic activities are included with the materials and are suggested for pre- and post-instruction. Throughout the activities the student learning is assessed by both teacher and students. Appropriate guidelines for assessment are built into the Teacher's Guide.

TIME REQUIREMENTS

The activities in Constructing Dramatic Plot take from ten to 15 hours of actual playing time to complete.

IMPLEMENTATION PROCEDURES

Constructing Dramatic Plot does not require a specialist teacher. The pacakge may be handled as a group activity, or students may progress through the games at their own pace on a small-group basis. Diagnostic activities can best be administered on a group (3 students minimum) basis. Students will need more space than the conventional desktop. An area approximately 8' x 8' would be sufficient. The Teacher's Guide outlines all procedures for the teacher and has been rated as quite useful in field trials.

The teacher is encouraged to relate the activities in this package to examples of dramatic plot in professional plays, TV programs, films, cartoons, new articles, and real-life events in school and the community.

Field reports indicate that the materials stand up well with repeated use in the classroom.

MATERIALS, EQUIPMENT, AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student Materials:				
2 sets of 3 game boards 2 sets of rule sheets for each game 2 boxes of game cards (145 cards in each box) 60 diagnostic activity sheets	1 set per 6 students	$45.00*	Diagnostic activity sheets consumable yearly	
Teacher Materials:				
Teacher's Guide (24 pp) Set of 21 sample plot cards		$15.00*		

*Prices subject to change.

Summary Cost Information

Packages can be purchased in varying multiples of six-student sets, for example, 12-student, 18-student, 24-student sets. Student and teacher materials can be purchased separately, so that only one set of teacher materials need be purchased with two, three, four, or five student sets. Cost for one complete unit containing enough materials for one teacher and six students is $60.00.

Personnel Required for Product Adoption and Implementation

The classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher and by CEMREL, Inc. Curriculum consultation is also available from CEMREL, Inc. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

The information gathered from pilot trial of the materials and subsequent use in 41 states indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented without additional aid beyond that given in the Teacher's Guide. The developers and publishers have not received any reports of harm associated with the use of this product.

Packages are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such material in the package causes an appropriately directed review of the materials by a qualified person from outside of the program. The materials are revised to eliminate such shortcomings.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information on the utilization of the published version of the package on a yearly basis.

The pre-publication evaluation of this package was carried out with grade 2, 3, and 4 students in local schools. A specifically constructed test indicated that students who received package instruction were more able to construct a dramatic plot than students who were not taught the package.

AVAILABILITY

Constructing Dramatic Plot was copyrighted in 1973 and copyright is claimed until 1981. It is currently available from the publisher/distributor:

The Viking Press/Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

INFORMATION CURRENT AS OF MARCH 1975

Evidence to Support Assurances and Claims for *Constructing Dramatic Plot*

Careful Development:

Assurances and claims of careful development are supported by the *Basic Program Plan, Aesthetic Education Program* (CEMREL, 1972). This source explains in detail the standard procedures followed in the development and evaluation of this product. A hothouse evaluation report was prepared for this package, and describes the results of intensive observation of package activities in a single classroom trial. A pilot evaluation report shows the results of package trial in three different classroom settings. Both hothouse and pilot evaluation reports are available.

Test Results:

In post-testing students identified sections in given stories that corresponded to package concepts (setting, characters, conflict, crisis, and resolution) and a significant gain at the .001 level was found between treatment and control groups.

Student Satisfaction:

Students responded to a questionnaire based on a pilot version of the package. The results are summarized in Table 1 of the Pilot Report, page 4. In responding to the questionnaire, 19.7% responded "good," 52.6% "very good" in attitude toward package; 78.9% said they would like to repeat this package.

Teacher Satisfaction:

Teachers who taught a pilot version of the package responded to a questionnaire. The questionnaire with the results tabulated is reproduced as Appendix B of the pilot report. All teachers who taught the package at pilot level stated that they would recommend the package to other teachers. Extensive post-pilot field tests were conducted on this package. Teachers in this study corroborated the pilot findings. Of the teachers involved in these field trials, 92% said they would recommend the package to other teachers and 83% said their students were excited about or looked forward to each lesson (Aesthetic Education Program Extended Pilot in Pennsylvania, Appendix A, Page IX, June, 1973).

NIE PRODUCT: CREATING CHARACTERIZATION
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory, Inc.)
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NARRATIVE DESCRIPTION

The Aesthetics and the Creative Process series of the Aesthetic Education Program includes this instructional package, which deals with the physical and vocal expression of emotion in a theatrical characterization. The primary student uses a broad range of instructional materials--photographs showing physical expression of emotions, a "puzzle" that can be put together in a variety of ways to show a single emotion, masks, a filmstrip, and a recording presenting vocal expression of emotion. These materials stimulate exploration and activity that allows them to synthesize an emotional characteristic with their own voices and bodies. The improvisations are evaluated by fellow students, always with emphasis on the discoveries taking place rather than on the presentation of a polished performance. A satellite lesson explores the characterization problem with color or texture as ways to express an emotion theatrically.

This package will encourage students to look at the pictures in the emotion book and discuss how the emotion in each picture is expressed non-vocally; to arrange characterization picture composites to demonstrate that they have learned that character emotions can be expressed by the face, arms/hands, and legs/feet, as well as by the whole body; to imitate the picture composite they have arranged; to select an Emo mask and attempt to express its emotional trait through use of body movement and voice, both separately and in combination; to attempt to create a voice and movements for either an angry, a fearful, or a happy character and to present a group improvisation; and to select a color and a texture and attempt to express related emotional traits.

Sample Lesson
(Addressed to Teachers)

This lesson familiarizes the student with the word emotion, encourages him to think consciously about the range of emotions, and helps him discover how a character's emotional traits can be expressed non-vocally (physically).

The emotion book contains photographs of different people expressing emotions physically. The first photographs emphasize emotional expressions on the face, then expression of emotion by the arms/hands, legs/feet, and, finally, full-figure views show emotional expression by the whole body. The student will gain some understanding of non-vocal emotional expression through a discussion of each picture with the teacher.

There are no "correct" answers in the student's response. Two students looking at the same picture may interpret the same non-vocal cues differently. This is perfectly all right so long as the student attempts to explain his decision. Expecting "correct" answers may force a stereotyping and lead the student to read the cues as he thinks you want them read, rather than exploring his own perception. You may wish to discuss this difference in perception as an interesting phenomenon.

The emotion word list is provided as a resource to indicate a range of vocabulary to aid in the discrimination of emotion description. It is realized that the list is not definitive; students may wish to add words. It is also realized that some words are not commonly used in all of the lower primary. It is hoped that the list will help to increase vocabulary of description of emotional characteristics and that you will use as many of these words as possible that are appropriate to a specific class.

In the review, reinforce the idea that various parts of a person can express an emotion and that by putting parts together, the "whole person" can express an emotion. Be sure that each student understands the concept of the lesson. You may wish to engage in a discussion about non-vocal cues around the school and the home. Students may be able to imitate how you or their parents express emotions without talking.

SUBJECT AREA(S)

Aesthetics and the Creative Process: Theatre Arts

Introduction of the word emotion; how the actor combines the use of facial expressions, gestures, body movements, vocal rhythm, pitch, tone, rate, and volume to express emotions; the process of transforming physical and vocal elements into a characterization; the theatrical relationship between color-texture-emotion-characterization.

INTENDED USERS AND BENEFICIARIES

Although designed primarily for all third grade students, Creating Characterization has been used in grades 2-12 as well as with college students. While formal testing has not been done at all grade levels informal reports indicate that these uses have been successful.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package is to 1) know that there are different modes of non-vocal and vocal expression of emotions; 2) know that the portrayal of emotion in a theatrical context is a deliberate decision-making process; 3) perceive and describe the relationship between the voice, the movement and the emotions of a character as expressed by the actor; and 4) to synthesize elements of characterization and create simple characterizations within improvisations.

PATTERNS OF USE

Creating Characterization is a self-contained unit of instruction with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in drama; linked with other "theatre based" units developed by the Aesthetic Education Program to create a curriculum; linked with other AEP units which are related to music, art, dance and literature and which are clustered around "Aesthetics and the Creative Process"; used with language arts programs.

ASSESSMENT PROVISIONS

Learning is assessed by the teacher and by the students. Students take a pre-test which can also be administered as a post-test. The teacher is provided with observational "clues" as well as questions to assess learning for each activity. Teacher and student evaluation sheets as well as guidelines to interpret them are provided to assess the final improvisations performed by the students.

TIME REQUIREMENTS

Creating Characterization takes approximately 10 hours to complete depending on class size and utilization of suggested "additional activities." Teachers generally take about 45 minutes per day, two to three days per week.

IMPLEMENTATION PROCEDURES

Creating Characterization does not require a specialist teacher. This instructional unit has been tested with students in Grade 3, but may be used with younger or older students at the discretion of the teacher or curriculum specialist. It is recommended that

Creating Characterization be taught in small groups to enhance interaction and allow the teacher to respond specifically to each student. Students will require more space than a small desk; they will need room to spread out their materials so that they will not conflict with others. The Teacher's Guide outlines all procedures for the teacher and has been rated as quite useful in field trials.

The teacher is encouraged to relate the activities to theatrical experiences by having the students analyze television programs and attend "live" theatre performances, and by bringing theatre artists into the classroom.

Field reports indicate that the materials stand up well with repeated use in the classroom. Consumables are minimal and easily purchased from the publisher.

MATERIALS, EQUIPMENT AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student Materials including books, puzzles, masks, texture samples, pre-test and post-test sheets, and student evaluation sheets.	1 set per 6 students	$52.50*	Test and evaluation sheets are consumable yearly.	
Teacher Materials including guide, filmstrip, record, theatrical gels, emotion cards, wall chart, evaluation sheets		$32.50*		

*prices subject to change

Summary Cost Information

Depending on classroom organization, units can be purchased in varying multiples of 6, e.g. 12-student, 18-student, 24-student sets with teacher materials, etc. Student materials and teacher materials can be purchased separately. Costs are figured on multiples of the base price per 6-student and teacher module--cost for one unit containing enough materials for the teacher and 6 students is $85.00.

[redacted]

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this unit of instruction; workshops are offered by the publisher and the laboratory as well as curriculum consultation by the laboratory. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socio-economic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trials indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The major claim to be made about the Aesthetic Education Program's Instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information on a yearly basis.

The pre-publication evaluation of this unit was carried out with grade 3 students in local schools. Specially constructed tests regarding the basic goals of the package compared students taking the package to other students. The results showed that students exposed to the unit were significantly superior in understanding important aspects of theatrical character development. Student and teacher satisfaction with the materials was also high, as measured by a post-treatment attitude scale.

AVAILABILITY

Creating Characterization is currently available from the publisher. Product carries a 1973 copyright date, and copyright is claimed until 1981.

The Viking Press/Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

INFORMATION CURRENT AS OF MARCH 1975

Evidence to Support Assurances and Claims for *Creating Characterization*

Careful Development:

Assurances and claims of careful development are supported by the *Basic Program Plan, Aesthetic Education Program* (CEMREL, 1972). This source explains in detail the standard procedures followed in the development and evaluation of this product. A hothouse evaluation report was prepared for this package, and describes the results of intensive observation of package activities in a single classroom trial. A pilot evaluation report shows the results of package trial in three different classroom settings. Both hothouse and pilot evaluations were completed on *Creating Characterization*. *An Overview of Development and Evaluation of the Five Sense Store* (Edwards, 1974) explains the procedure through which the program continues to gather information on products which are presently being used in the field.

Effectiveness:

A post-test was designed to investigate whether the segments of learning on the theatrical concepts were transferred to the students' perception of theatrical events.

There were two items in the test; each item consisted of 1) a color picture of a character portraying an emotional state and 2) a sound tape containing a short (about 10 seconds) monologue in gibberish spoken by the character, the voice quality of which portrays the same emotional state as the picture. The picture (projected on the screen) and the sound tape were presented together. The sound tape was replayed about 5 times while the picture was left on the screen until all the students finished answering the questions (about 3-5 minutes).

The questions on the answer sheet were two:

1) I think the person is feeling: (Circle one of the following words or give your own description in the blank provided.)

2) List all of the things that you have noticed about this person which tell you how he is feeling.

The first question was simply a device to channel the students' attention to the emotional characteristic of the character and the answers to which were considered irrelevant to the objectives of this unit.

The scoring of the test was carried out with answers to question 2 only. The answers were content-analyzed into 5 categories of responses: 1) those related to facial expression, 2) those related to gesture or other bodily expression, 3) those related to motion, 4) those related to voice quality and 5) those related to the costume of the character.

The test was administered to the instruction group and a comparable non-instruction group one week after the former had completed the lessons. It was administered to five students at a time. Those in the instruction group were given this test instruction: "In the characterization package, we have discussed and experienced many different ways in which a character's emotion is expressed." (Then the questions on the answer sheet were read and explained.) To the non-instruction group, the test instruction was: "Have you noticed that many times you can tell how a person is feeling, although he does not use words to tell you whether he is angry or happy?" (Then the questions on the answer sheet were read and explained.) Assistance in spelling was provided on an individual basis, so that the problem of writing ability was partially alleviated.

Post-pilot field trials were conducted on Creating Characterization. Of the teachers involved, 100% said they would recommend the package to other teachers, and 92% said their students were excited about or looked forward to each lesson (see Aesthetic Education Program Extended Pilot in Pennsylvania, Appendix A, p. IX, June, 1973).

from Pilot Report
(June 1972) p. 30-31

I: The test results were boken down in terms of the number of responses in each category:

		Category 1 (facial expression)	2 (bodily expression)	3 (motion)	4 (voice)	5 (costume
Item 1:	Instruction Group (22)	26	17	8	10	11
	Non-Instruction Group (20)	20	0	6	7	6

		1	2	3	4	5
Item 2:	Instruction Group (22)	38	20	11	9	13
	Non-Instruction Group (20)	31	3	14	10	4

		1	2	3	4	5
Items 1 and 2 combined	Instruction Group	64	20	19	19	24
	Non-Instruction Group	51	3	20	17	10

The differences between the two groups were most prominent with regard to categories 2 and 5. Category 2 refers to responses that are related to bodily expressions and category 5 refers to responses that are related to the costume of the character. In both cases, the Instruction Group showed more awareness toward these stimuli and their relationship with the expressed emotion of the character. However, "clothes" was the most frequent response that was classified as Category 5. Only 2 students specifically refered to the color of the costume and only one student mentioned the texture of the costume.

II. The test results broken down according to the proportion of students who gave responses in each category were:

		1	2	3	4	5
Item 1:	Instruction Group	15/22	9/22	7/22	10/22	10/22
	Non-Instruction Group	11/20	0/20	6/20	6/20	6/20
Item 2:	Instruction Group	16/22	9/22	10/22	9/22	7/22
	Non-Instruction Group	17/20	2/20	12/20	8/20	4/20

		1	2	3	4	5
Item 1 and 2 Combined	Instruction Group	31/44	18/44	17/44	19/44	17/44
	Non-Instruction Group	28/40	2/40	18/40	14/40	10/40

This data suggests that the package perhaps has contributed to an increase of the students' perception of physical expression of emotions as well as the relationship between the costuming and expressed emotions.

NIE PRODUCT: ARRANGING SOUNDS WITH MAGNETIC TAPES
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional
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Sharon Bocklage, Editorial Coordinator
Ed Sweda, Product Developer

NARRATIVE DESCRIPTION

Part of the Aesthetics and the Creative Process group of Five Sense Store packages, Arranging Sounds with Magnetic Tapes involves students in the creative process as they select and arrange prerecorded sounds. Students juxtapose sounds of different rhythms and tone colors, such as squealing pigs, hilarious laughter, or sonic pings, and manipulate their durations. An introductory tape explains and illustrates simple arranging with taped sounds. A library of twenty taped sounds, a splicing block with attached take-up reel and scissors, a set of student direction cards, and graphically illustrated charts are the students' tools. As they arrange selections from the sound library, students discover how to use time, sound quality, and other elements of sounds to produce compositions having unity and balance. As they make decisions about the planning and construction of their sound arrangements, they are involved in the same creative process experienced by the arts in music and other arts areas.

This package will encourage students: 1) to develop mechanical skills--cutting and splicing--required for working in the medium of taped sounds; 2) to appreciate, through exposure to different and unusual sounds, the wide range of sounds and music in our contemporary society; 3) to experience form through using repetition, duration, and silence in developing a theme; and 4) to become aware of the creative process engaged in by arrangers and composers through selecting and arranging sounds to create a theme and variations.

Sample Lesson
(Addressed to Teachers)

Lesson Four: Creating a Theme and Variations

Concept: An awareness of the creative process engaged in by the arranger-composer can be gained by selecting and arranging sounds to create a theme and variations.

General Objective of the Lesson: The students will add yet another dimension to their arrangements by varying the order, as well as the duration, of three selected sounds.

By now the process of developing a theme by repeating three or four selected sounds should be familiar. In this lesson students are asked to repeat selected sounds in combinations and with variations they choose. In other words, they will be creating a theme and variations.

Listening time for the arrangements may be scheduled at your discretion. If the students seem eager to hear their works, you might schedule a listening period immediately after the teams have completed the splicing process. The maximum time for each arrangement will be three minutes (twenty sounds, nine seconds each), and most will probably be two minutes or less. Therefore the listening time will not be extensive.

Now distribute Sound-Action Card I to your students and let them proceed with the lesson.

(Addressed to Students)

Sound-Action Card I

This time arrange a three-sound theme. Do everything you did for Sound-Action Card F and add one more step: Change the order of the sounds in your theme each time you repeat it. By changing the order as well as the length of the sounds, you will be creating a theme and variations.

Variations are new forms of a theme. Repeat your theme and variations until your holding board is filled. Remember to think carefully about how the sounds sound. Talk it over with your teammates before choosing your sounds. Write your arrangement out on your holding board. Cut and splice it as you did before.

Choose a title for your arrangement that describes what it is like. Then introduce and play your arrangement for the other teams and listen to their arrangements. Describe the feeling you wanted to give with your original theme. Did changing the order of the sounds in your theme change the feeling your theme gave? If it did, describe the feeling that the variations on your theme gave to you. Ask your classmates how they felt about your theme and variations.

SUBJECT AREA(S)

Aesthetics and the Creative Process: Music

Proficiency in the mechanics of cutting and splicing tape; exposure to different and unusual sounds in order to enhance student appreciation of the wide range of sounds and music in contemporary society; selection and arrangement of sounds to create a theme and variations; decision making about the aesthetic quality of sound tape arrangements.

INTENDED USERS AND BENEFICIARIES

Although Arranging Sounds with Magnetic Tapes was formally tested at the third grade level, it has been used successfully with students from third grade to juniors in high school. It has also been used with adult groups.

GOAL(S) OR PURPOSES(S)

The primary purpose of this package is to let students encounter the creative process through the selection and arrangement of sounds so they can gain an awareness of the arranger-composer's art. In addition, the package exposes students to different and unusual sounds so that they can better appreciate the wide range of sounds and music in our culture.

PATTERNS OF USE

Arranging Sounds with Magnetic Tapes is a self-contained unit of instruction with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in music; linked with the other music-based packaged developed by the Aesthetic Education Program to create a curriculum; or used with other AEP packages which are related to art, dance, theatre, and literature and which are clustered around "Aesthetics and the Creative Process."

ASSESSMENT PROVISIONS

While there is no formal testing, learning is assessed by the teacher and the students. Student products are examined and analyzed and the final composition can be used as a posttest of the package. Guidelines for informal evaluation are built into the package.

TIME REQUIREMENTS

Arranging Sounds with Magnetic Tapes takes approximately eleven hours to complete. The activities are done in time periods of from 45 to 60 minutes.

IMPLEMENTATION PROCEDURES

Arranging Sounds with Magnetic Tapes does not require a specialist teacher. It is most effective when an entire class, or as many students as possible, use the materials simultaneously. Although the students work in teams of three, the reaction of the three-student teams to one another's arrangements is a very important part of the package. The Teacher's Guide outlines all procedures for the teacher and has been rated as quite useful in field trials.

The teacher is encouraged to have the students move into independent experimentation with tape composition.

Field reports indicate that the materials stand up well with repeated classroom use. Consumables are minimal and easily purchased from the publisher.

MATERIALS, EQUIPMENT AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student Materials: 2 holding boards 2 rolls blank tape 100 sheets editabs (90/sheet) 2 splicing blocks 2 rolls masking tape 2 grease pencils 2 sets Sound-action cards (12 cards in each set)	1 set per 6 students	$92.50*	Blank tape, editabs, masking tape, and Sound Library tapes consumable yearly	
Teacher Materials: 1 Sound Library board 1 set Sound Library tapes (20/set) 1 Information-narration tape 1 set of charts (3/set) 1 Teacher's Guide		$162.50*		

*Prices subject to change

Summary Cost Information

This package can be purchased in sets of varying multiples of six, e.g., 12-student, 18-student, 24-student sets. Student materials and teacher materials can be purchased separately so that only one teacher set need be purchased with two, three, four, or five student sets. Cost for one complete set containing enough materials for one teacher and six students is $255.00.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training in music can implement this instructional package. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socio-economic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials.

The pilot evaluation of this package was carried out with grade three students in local schools. Teachers reported that students were able to master the technical skills of splicing, etc.; delighted in engaging in the creative process of arranging sounds and appeared to be more aware of sounds in their environment. Both teachers and students indicated a high degree of satisfaction with the materials as indicated by post-package attitude measures.

AVAILABILITY

Arranging Sounds with Magnetic Tapes was copyrighted in 1973 and copyright is claimed until 1981. It will be available as of Spring 1975 from the publisher/distributor:

The Viking Press/Lincoln Center for the Performing Arts
625 Madison Ave.
New York, N.Y. 10022

INFORMATION CURRENT AS OF MARCH 1975

Evidence to Support Assurances and Claims for Arranging Sounds with Magnetic Tapes

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1972). This source explains in detail the standard procedures followed in the development and evaluation of this product. A hothouse evaluation report was prepared for this package, and describes the results of intensive observation of package activities in a single classroom trial. A pilot evaluation report shows the results of package trial in three different classroom settings. An Overview of Development and Evaluation of the Five Sense Store (Edwards, 1974) explains the procedure through which the Program continues to gather information on products which are presently in use in the field.

Effectiveness:

Teachers from schools serving a variety of socio-economic levels who taught a pilot version of the package responded to a questionnaire. Their responses indicate satisfaction with the package, all reporting no difficulties in using the package and indicating willingness to use it again (see p. 45-58 Pilot Report). Within the same questionnaire, all the teachers reported that students were able to master the technical skills of splicing, etc., required by the package and became more aware of sounds in their environment as indicated by spontaneous comments by students (see pp. 45-58 Pilot Report). Students responding to orally administered questionnaires also indicated satisfaction with the package, 70.2% reporting that they were very highly or highly satisfied with the package and 88.9% stating that they understood and learned from it.

NIE PRODUCT: FORMING WITH MOVEMENT
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
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Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Linda Slama Kelly, Product Developer

NARRATIVE DESCRIPTION

This package, part of the Aesthetics and the Creative Process group of the Five Sense Store, provides the opportunity for students to become familiar with some elements of the art form of dance. A workbook and three project booklets are the vehicles used to help students understand the concept of forming in its broad sense and in the particular sense of forming with movement. When they have completed these activities, the students should understand the meaning of sequence and be able to perform movement sequences having repetition, contrast, and both repetition and contrast. They should be aware that like artists they can have many reasons for forming with movement. They will also understand the concepts of level, direction, and dimension and be able to incorporate these into their movements. When they have completed these activities they should have a better grasp of the intentions, criteria, and decision making requisite to the creative process and, in this case, to the process of forming with movement.

Sample Lesson
(Addressed to Teachers)
Lesson 2

General Description: The students work with you to establish a safe and constructive management system for the creative movement activities which follow.

Procedure: During this session, point out to the students these three major ideas:

a. "You have control over your body and its movement; so you can do many different and unique movements and you can stop them." Also along this line, "Your body has limitations and you should use good common sense about how far you push it."

b. "Two bodies cannot be in the same space at the same time. Thinking ahead, being careful, and being willing to cooperate will be needed so that we can all work safely and successfully together."

c. "Creative movement activities can be a great deal of fun and very exciting, but they are not the same as playing. They are serious and can be hard work. Many interesting things can happen if the work is done well."

Decide whether you want to simply discuss the ideas above with the students before they move or do it as you proceed with some movement. Whatever you decide, have them do the suggested movement activities so that they get used to moving creatively and safely while you maintain the necessary control of the classroom.

Consider establishing some "signals" or "rules" (whichever word you prefer) between you and the students as you do starting--stopping--listening--looking--resting. The cues may be things you already use in the classroom, such as certain words, lights, clapping hands, certain noises. This will help to organize and add more fun to the work.

Here are some movement ideas for the students to work with. Give them time to explore and practice the steps of problem solving through movement.

a. "Find how many ways you can move your head, arms, legs, back, whole body."

b. "Find how many shapes you can make with your body. Then move in slow motion from one shape to the other."

c. "Find how many different ways you can move from one place in the room to another place in the room."

d. "Find how many ways you can support your body and still keep moving. Besides on your feet, how else can you move?"

Tell the students to close their eyes (except when moving through space) as they explore. This will help to shut out distractions, open the imagination, and encourage concentration on the kinesthetic experience.

Give the students an opportunity to see others' ideas but take care not to make them "perform" prematurely. A nice compromise is this: at the end of each exploration have half the group sit down and the other half help share what they found. This prevents singling out any one individual and developing self-consciousness. Large groups provide a comfortable anonymity.

Be sure to make the point of no right or wrong way of moving but, rather, a "solution." As the students watch others, tell them to notice that a variety of solutions can be equally good if the movement is clear and controlled.

SUBJECT AREA(S)

Aesthetics and the Creative Process: Dance

Forming, or the creative process, involves having intentions, establishing criteria, and making aesthetic decisions. All of these elements can be identified in the process of forming with movement.

INTENDED USERS AND BENEFICIARIES

Forming with Movement was designed for use with third grade children but can be used with older children as well.

GOAL(S) OR PURPOSE(S)

The purpose of this package is: 1) to help students organize their own method, or structure, for completing a whole work of their own design, in this case, forming with movement; 2) to help students describe and analyze aesthetic decisions in relationship to forming with movement; and 3) to help students learn to make critical judgements about the movement patterns made by individual students and groups of students, these judgements to be based on the student's own aesthetic criteria.

PATTERNS OF USE

Forming with Movement is a self-contained set of materials with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in dance; linked with other AEP packages related to dance; used with other AEP packages in the "Aesthetics and the Creative Process" group; and used in the refinement of motor skills and sense perception skills.

ASSESSMENT PROVISIONS

Throughout the unit, student learning is assessed by both the teacher and the students themselves. In the student books, a checklist at the end of each creative task encourages students to evaluate their own work as they proceed through the activities. For the teacher, a series of observation schedules are included as a guide to judging student success with the movement activities. Additional guidelines for assessing other aspects of student performance are interspersed throughout the Teacher's Guide.

TIME REQUIREMENTS

Forming with Movement takes a minimum of eight hours to complete and will take longer if the teacher makes use of the additional discussions or repeats some of the activities. The nine activities work best when they are broken into thirty and forty-minute sessions.

IMPLEMENTATION PROCEDURES

Forming with Movement does not require a specialist teacher. The package is designed to be used with large or small groups for students from second-semester third grade to fifth grade levels. Students who have an above average reading ability may work through much of the materials on their own after the first two introductory activities. The Forming with Movement Workbook is designed to be totally teacher-directed, however, and the culminating activities are to be done as a whole group.

The activities require a good deal of open space for free movement, and when it is possible, the teacher is encouraged to take the students outdoors to work on the materials.

MATERIALS, EQUIPMENT, AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student Materials:				
6 Forming with Movement workbooks		*		
6 Level books	1 set per 6 students			
6 Dimension books				
6 Direction books				
Teacher Materials:				
1 Teacher's Guide		*		

*Materials are still in the prototype stage and costs have not been determined.

Summary Cost Information

Depending on classroom organization, units can be purchased in varying multiples of six, e.g., 12-student, 18-student, 24-student sets with teacher materials, etc. Student materials and teacher materials can be purchased separately.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this unit of instruction. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials was evaluated during its trial use in four separate classrooms of widely varying ethnic and socio-economic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial indicates that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information about the utilization of the published version of the package on a yearly basis.

The pilot evaluation of Forming with Movement was carried out in third grade classes in four local schools with widely varying ethnic and socio-economic characteristics. None of the four teachers had any special training or knowledge of dance or movement education. The results of these evaluations, which included intensive observation, teacher and student questionnaires and interviews, and performance measures specifically constructed to assess the major hypothesized outcomes of the unit, support the following claims. Students who received package instruction were able to demonstrate kinesthetically an understanding of the majority of the major movement concepts underlying the package and further, could apply these terms critically according to the criteria for forming established by the package. Students evidenced a high degree of involvement and satisfaction with the materials, measured by both self and teacher reports. Although the activities are necessarily somewhat noisy and require moving desks to achieve the needed classroom space, teacher response to the package was very positive. These materials were observed by teachers to increase constructive group interaction and communication among their students and were judged particularly effective in helping to integrate the shyer students into the group.

AVAILABILITY

Forming with Movement is copyrighted and will be completed by November 1975.

INFORMATION CURRENT AS OF MARCH 1975.

Evidence to Support Assurances and Claims for Forming with Movement

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1972). This source explains in detail the standard procedures followed in the development and evaluation of this product. A hothouse evaluation report was prepared for this package, and describes the results of intensive observation of package activities in a single classroom trial. A pilot evaluation report shows the results of package trial in three different classroom settings. Both hothouse and pilot evaluation reports are available.

Development of Perceptual and Critical Skills Regarding Movement and Dance:

The teachers who taught the pilot version of Forming with Movement were interviewed in depth about their experiences and also responded to a questionnaire about the package. A summary of the questionnaire and interview data may be found in pages 23-27 of the Pilot Test Report on this unit. Both teachers felt that the package had helped increase their students' awareness of movement. Information from the student interviews and the results obtained with the revised Movement Criticism Test tended to cooberate their opinion.

During the student interview, in a task designed to be relatively independent of verbalization ability, students were asked for performance definitions of the seven major concept terms of the package. Scoring was done on a simple pass-fail basis. The percentage of students passing for each movement term can be found on page 22 of the Pilot Test Report. A majority of students were successful in kinesthetically defining four of the seven terms.

In the Movement Criticism Test, students were asked to criticize two thirty-second videotaped movement sequences designed and performed by the package developer. The first movement sequence was "well-formed" according to the criteria established by the package, while the second was not. In the final form of the test, the students' task was to choose the rendition which most closely exemplified the movement principles discussed in the Forming with Movement package and to criticize the other movement sequence as justification for his/her choice. A discussion of the results will be found on page 29 of the Pilot Report. 86.7% of the students tested were able to correctly perceive the "better" of the two movement sequences. Further, students were able to identify the better sequence independent of their subjective preference between the two. Critical analysis of the poorer movement sequence was accomplished through group and individual interviews following the administration of the identification task. The frequency and fluency with which students cited movement principles and terminology introduced by the package in their criticisms led the evaluation team to conclude that the package satisfies its goal of developing a critical vocabulary regarding movement. (*Forming with Movement* Pilot Report, page 29.)

Student Satisfaction:

In two of the three pilot schools, 96% of the students reported during the student interviews that they enjoyed their work with the materials (see page 21 of the Pilot Report). At the third pilot school, students were asked to discuss their reactions to the package in comparison with other areas of the curriculum. Fifty percent reported that *Forming with Movement* was the "best thing" they were doing in school at that time. Thirteen percent liked it "better than most things" and another 20% judged it "better than some things." No students felt that doing the package was "worse than most things" they were doing in school at the time. Further evidence of student satisfaction is based on teacher reports. Responding to a standardized questionnaire, the teachers indicated that the majority of their students looked forward to each lesson and/or were "very excited about the lessons."

Teacher Satisfaction:

The evidence of teacher satisfaction comes from the questionnaire and interview data. Both teachers interviewed said they would teach the package again and would recommend it to other teachers.

Development of Constructive Group Interaction:

This claim is based on teacher observation reported during their interviews and is discussed on page 26 of the Pilot Report.

Forming with Movement is currently being revised, utilizing the information obtained from the pilot trials of the package. These revisions should increase the frequency of the student outcomes noted in the pilot version of the package.

D. Aesthetics and the Artist Series

Summary Statement: Aesthetics and the Artist Series (Grades 4-5)

Objectives: To identify major concepts, approaches to study, objectives, and alternate solutions to the problems of analysis and selections of curriculum content for aesthetic education applicable to the overall concept Aesthetics and the Artist for grades 4-5. To implement the development, trial teaching, and revision of units of instruction in this area by preparation of seven multi-media sets of materials.

Description: Materials in this series are intended to teach students about the people who make works of art, why they do it, and where they get their ideas. Each set of instructional materials helps students see how an artist develops an idea, works with art elements, and organizes these elements into objects and/or performances. The students also create their own art works by doing activities analogous to the process artists use.

Instructional units in this Series include:

The Actor	4 & 5
The Architect	4 & 5
The Choreographer	4 & 5
The Composer	4 & 5
Filmmakers	4 & 5
The Responsive Audience	4 & 5
The Visual Artist	4 & 5
Writers: Poets, Storytellers, and Playwrights	4 & 5

Outcomes: The student understands artists are individuals involved with everyday human concerns as well as with artistic concerns.

The student perceives, analyzes, and describes the process that artists use in creating a work of art.

The student engages in activities similar to those artists use in creating works of art.

The student develops a critical language for both describing and responding to works of art.

Status Report: As of November 30, 1975, six of the eight multi-media instructional units (The Actor, The Choreographer, The Composer, Filmmakers, The Visual Artist, Writers: Poets, Storytellers, and Playwrights) will be completed. One unit (The Architect) will be in the testing cycle. One unit (The Responsive Audience) will be ready for testing.

Series Products:	"How 'The Visual Artist' Came To Be" by Jerilynn Kupferberg Changar.
Artists Featured in the Series:	The Actor: Mary Alice, Saundra Deacon, Will Geer, Paul Newman, Mary Lou Rosato. The Architect: Bill Turnbull, Richard Whitaker, Ben Weese, Hugh Hardy, Malcolm Holzman. The Choreographer: Katherine Posin, Erin Martin. The Composer: Robert Wykes, Harry Chapin, Shulamit Ran. Filmmakers: David Holden, Alfred Hitchcock. The Responsive Audience: Charles Champlin, Roger Ebert, Alan Rich, Martin Bernheimer, Dennis Hunt, Robert Hilburn, Richard Coe, William Como, Tobi Tobias, Ron Powers, Cecil Smith, Brian O'Doherty, William Wilson, Wayne Warga. The Visual Artist: Robert Indiana, George Segal, Richard Hunt, Marisol (Escobar). Writers: Poets, Storytellers, and Playwrights: Doris Gates, Alisa Kwitney, Peri L. Dwyer, William Armstrong, Lloyd Alexander, Sarah Brown, Nikki Giovanni and others.

The following information describes each instructional unit in more detail.

NIE PRODUCT: THE ACTOR
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory, Inc.)
3120 59th Street
St. Louis, Missouri 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Donald Rickner, Product Developer

NARRATIVE DESCRIPTION

This set of instructional materials, one of the Aesthetics and the Artist series of Five Sense Store packages, is designed to acquaint the student with who actors are and what they do. The materials include tapes or slide-tape presentations for each activity in which actors Mary Alice, Saundra Deacon, Will Geer, Paul Newman, Mary Lou Rosato and Luis Valdez talk to the students about their experiences, training, research, practice and performances.

In the set of materials, three lessons deal with the actor as an artist who develops through years of experience and learning, an artist who sharpens the nearly universal tools of body, voice, and mind to the point that she or he is able to adapt to performing a wide variety of roles in various performance places and before various audiences. The students explore actor training by engaging in exercises suggested by the artists on the tapes. The students explore the process of acting by playing the Acting Game which challenges them to build characters. The game asks the students to make choices of general character types, plots, and styles. A 5' X 20' visual environment (three-walled, hinged display board) provides an introduction to and summary of the primary concepts of the unit, and a cartoon-style student journal provides a place for the students to record their responses to the package.

This package will encourage students 1) to make observations and judgments about the various ways people, including actors, express ideas and feelings through elements such as body and voice; 2) to listen to actor-artists talk about who they are, what they do, and how they do it; 3) to perform acting exercises and to build a character in an improvised scene based on their observations, the artists' comments, acting exercises, and their own experiences and imagination as guides to making critical choices; 4) to create a personal journal on actors in which they express their responses to the materials in their own words and in pictures; 5) to help choose and coordinate theatrical elements, such as directing, designing, executing, or managing, through a group sharing process as they create improvised scenes; and 6) to perform their improvised scenes in an assigned place and for an assigned kind of audience.

Sample Lesson
(Addressed to Teachers)

Lesson 8: Variety of Roles

Concept: Actors change as a result of playing different roles, and roles change when played by different actors.

General Description: The discussion based on the students' observations will make the student more aware of the large number of roles actors play and even most of us "play" as compared to the relatively few roles we and actors have in real life. The tape of Deacon, Newman and Rosato will draw attention to the way actors' voices, bodies and minds change as they play a variety of roles. By playing The Acting Game "Variety of Roles" segment, the students will experience playing different roles.

Procedure: Put up the "Variety of Roles" section of the visual environment. Point out the concept statement: actors change as a result of playing different roles, and roles change when played by different actors. Tell them that the four pictures represent a range of roles Will Geer has played.

Conduct a discussion of their observations. Whom did they observe that they wanted to play? Why? Have them think about the number of life roles they will assume. Not roles they'll "play" but roles they'll "be." They will mention mother, father, daughter, worker, friend, grandchild, cousin, buyer, seller, etc. Now ask them to think of all the roles they've played, that is, roles they've pretended. They may list nurse, dog, lion, tree, astronaut, etc. Tell them to consider how many roles an actress plays in a lifetime.

Tell them the tape is in two parts. The first part is a tape giving them a sound experience of a variety of the roles played gy Ms. Deacon. The second half is a slide/tape in which Paul Newman talks about the specific effect that some of the roles he has played have had on him, and Mary Lou Rosato tells us how she has changed as a result of having played a wide variety of roles.

Remind them of the concept statement that actors change as a result of playing different roles and roles change when played by different actors.

Divide students into small groups for the "Variety of Roles" segment of The Acting Game. Check to see if promised things from Activity 7——props, costumes, and so on—have been brought. Students are to switch roles. Each person is to be briefed by the person who played that role in the previous activity. After the briefing period break them out into an individual rehearsal period (5 minutes).

Have the groups rehearse for five to seven minutes.

Have the groups share their scenes with the class.

Lead the class discussion based on two questions. 1. How did the role change when a different actor played the role? 2. How idd you as an actor change in order to play a different role?

Tell them they will go back to their original roles next time.

SUBJECT AREAS

Aesthetics and the Artist: Theatre Arts

Experiences, training, research, practice, and performances of actors; the actor as artist who sharpens the tools of body, voice, and mind to react as he or she wishes; how an actor builds a character; who other people involved in theatre are, e.g., set designer, costumer.

INTENDED USERS AND BENEFICIARIES

The Actor is being developed for use by fourth and fifth-grade students. In all probability, it will be suitable for sixth, seventh, and eighth-grade students, as well.

GOAL(S) OR PURPOSE(S)

The purpose of The Actor is for students to know 1) who actors are and what they do; 2) how experiences, training, research, and practice are put together in performance; 3) and for students to experience for themselves the creative process engaged in by the actor.

PATTERNS OF USE

The Actor is a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in drama; or linked with other AEP units which are related to music, art, dance, and literature and which are clustered around "Aesthetics and the Artist."

ASSESSMENT PROVISIONS

Assessment for the learning activities will be designed during development of the instructional unit.

TIME REQUIREMENTS

The Actor is just now going into the first stages of testing. Therefore, an accurate statement about the length of time needed to complete the lessons is difficult to make. It is estimated that 20 hours will be required to do all the lessons.

IMPLEMENTATION PROCEDURES

The Actor does not require a specialist teacher. The lessons call for both large group and small group instruction. As the package has not yet been through any formal testing process, the usefulness of the Teacher's Guide has not been evaluated.

As presently planned, consumables are minimal and will be easily purchased from the publisher.

MATERIALS, EQUIPMENT AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost per Item	Replacement Rate	Source if Different from Distributor
Student materials:	*			
Student journal pads				
Student journal binders		*	Journal pads and answer sheets will be consumable	
Question sheets				
Acting Game				
Teacher materials:				
Sound filmstrip				
Tapes		*		
Visual environment board				
Teacher's Guide				

*Decisions regarding packaging and costs have not yet been made because materials are still in the first stage of development.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training in drama will be able to implement this instructional package. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

The instructional unit, The Actor, is presently in development. When completed it will be tested as defined in the Basic Program Plan 1972. At that time appropriate assurances and claims will be made.

AVAILABILITY

The anticipated completion date of The Actor is November, 1975. The package is copyrighted.

INFORMAITON CURRENT AS OF MARCH 1975.

NIE PRODUCT: THE ARCHITECT
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory, Inc.)
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Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Jerilyn Kupferberg, Product Developer

NARRATIVE DESCRIPTION

This set of instructional materials, one of the Aesthetics and the Artist series, introduces students to architects as persons who deal with form in function in designing buildings for people. The students explore the influences which affect the work of architects, the process of organization and decision-making through which their work develops, the people with whom architects work, and the end results--structures--of the whole process.

The instructional materials used in this package include a book of visuals illustrating the concepts that spaces which include people become places, an activity at a specific time becomes an occasion, places plus occasions become architecture, and "architecture is a human product which should order and improve our relations with the environment."[1]

A sound tape of interviews with architects will help the students understand better what motivates architects and how they live and work.

Using a card file called "Create a Place," students will be asked to come up with solutions to various architectural problems. A large poster will show students all the things an architect has to know in order to design a building.

This package will encourage students 1) to investigate their own spaces and how they experience them; 2) to become involved in activities that relate to the architects' perceptions and use of space and light; 3) to become involved in activities that involve decisions in relationship to form and function; and 4) to experience many types of architecture and explore their development in relationship to their previous experiences through the activities in the package.

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[1] *Intentions in Architecture*, Christian Norberg-Schulz (MIT Press, 1965.)

Sample Lesson

The Architect is still in the conceptualization stage. Therefore, no lesson is included here.

SUBJECT AREAS

Aesthetics and the Artist: Architecture

Definition of architecture; some historical background of architecture; differences in functions between large buildings, for example, offices or theatres, and homes; places are created for people to participate in specific kinds of activities; the appropriateness of a place for a given activity is in part a function of its aesthetic qualities.

INTENDED USERS AND BENEFICIARIES

The Architect is being designed for use by fourth and fifth-grade students.

GOAL(S) OR PURPOSE(S)

The purposes of this instructional package are for students 1) to understand that architects are people who deal with form and function in designing buildings for people; 2) to explore the influences which affect the work of architects; 3) to become familiar with the process of organization and decision making through which the architect's work develops; and 4) to understand that "architecture is a human product which should order and improve our relations with the environment."

PATTERNS OF USE

The Architect will be a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in art and architecture or linked with other AEP packages which are related to music, art, dance, drama, and literature and which are clustered around "Aesthetics and the Artist."

ASSESSMENT PROVISIONS

Assessment for the learning activities will be designed during development of the instructional unit.

TIME REQUIREMENTS

The Architect is now in the developmental stage. Therefore, no specific time requirements have been determined.

IMPLEMENTATION PROCEDURES

The Architect will not require a specialist teacher.

MATERIALS, EQUIPMENT AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source Different from Distributor
Student Materials:				
"Create a Place" card file	*	*	*	
Student book				
"Spaces and Places" activity board				
Teacher Materials:				
Sound tape				
Poster		*		
Teacher's Guide				

*Materials are in developmental stage; decisions on packaging and costs have not been made.

Personnel Required for Product Adoption and Implementation

The classroom teacher without special training will be able to implement The Architect. Workshops will be offered by the publisher and by CEMREL. Curriculum consultation is also available from CEMREL.

ASSURANCES AND CLAIMS

The instructional unit, The Architect is presently in development. When completed it will be tested as defined in the Basic Program Plan 1972. At that time appropriate assurances and claims will be made.

AVAILABILITY

The anticipated completion date of The Architect is November, 1975.

The package is copyrighted.

INFORMATION CURRENT AS OF MARCH 1975.

NIE PRODUCT: THE CHOREOGRAPHER
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory, Inc.)
3120 59th Street
St. Louis, Missouri 63139

Stanley S. Madeja, Program Director
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Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Joanne Robinson, Product Developer

NARRATIVE DESCRIPTION

The Choreographer, one of the Aesthetics and the Artist series of the Five Sense Store packages, introduces students to choreographers as creative artists who make dances which are presented in performance by dancer-performers.

To accomplish this, the students work primarily with a text, sound tapes, and their own bodies to identify the different roles of creators (choreographers) and performing artists (dancers) and to become acquainted with the materials of dance, movement. As they use their bodies to explore the expressive potential of movement, the students will experience dance as a creative art. They will begin to understand the choreographer's creative, decision-making process by making their own creative and aesthetic decisions about movement, design, props, setting, and costumes.

This set of materials will encourage students to: 1) look for and describe movement in their surroundings and to perceive how this movement, transformed by the imagination of the choreographer, becomes the source of dance ideas; 2) find new ways of using their bodies to move; 3) select and organize movement to express a specific idea or feeling; 4) appreciate the fact that the making of a dance is a highly personal, creative act, individual to every choreographer and to each dance; 5) improvise their own movement studies using ordinary objects--a chair, ball, scarf--as a source of ideas; 6) make careful choices of sound in combination with movement; and 7) select theatrical elements--props, costumes, lighting, settings--which will enhance the movement and communicate the theme of a dance.

Sample Lesson
(Addressed to Teachers)

Lesson 5: Movement, the Language of Dance

Purpose and General Description: The purpose of the activity is to teach students how to give their dances a clear beginning, middle, and end. The students compare the mechanics of turning words into a sentence to the structuring and organizing of movement into a dance. Then they select movement to illustrate a stimulus sentence.

Procedure: After the warm-up have the group sit on the floor in a semi-circle facing the chalkboard. On the chalkboard, write, in scrambled order, the words on the following sentence: The dancers go round and round and around. Use no capital letters and no period.

Have the group unscramble the words so that they read: "the dancers go round and round and around." You may need to give them a little help. Ask them to tell you what is needed in order to make the words a proper sentence, i.e., the need for a capital T and a period after the last "around." Add the capital T and the period. Remind the students that in this way we know where the beginning and end of the sentence are.

Discuss with the group the idea that movement is the language of dance. Point out that the movements of a dance are like the words that make up a sentence; they must be selected carefully and organized to express the choreographer's idea.

Explain to the group that like a sentence, or a paragraph, or a whole story, a dance needs a beginning and an end. Tell them that in order to give their dances a beginning and end, they will do the following:

a. They will start with no movement, holding the opening position of the dance.
b. They will do the movements of the dance.
c. They will freeze on the last movement, holding it.

Demonstrate this for the group in this way: Stand in place with no movement at all. Then walk from one spot to another spot in the room. Hold your last movement for a few seconds so that they can clearly see the end of your movement. Concentrate from beginning to end.

SUBJECT AREA(S)

Aesthetics and the Artist: Dance

What choreographers do and where they get their ideas; movement as the material of dance and the body as an instrument for making movement; role of theatrical elements--music, props, lighting--in dance productions; organization and presentation of student dances.

INTENDED USERS AND BENEFICIARIES

The Choreographer was designed for and is being tested with fifth-grade students. At the discretion of the teacher, however, it will be able to be used with students from fifth to eighth grades.

GOAL(S) OR PURPOSE(S)

The purposes of this instructional package are for students to 1) become aware that movement in their surroundings, transformed by the imagination of the choreographer, becomes the source of dance ideas; 2) be able to perceive and describe the design of the movement in others' dances and to use design as the basis for a dance study of their own; and 3) experience directly the creative process involved in choreography by making and performing their own dances.

PATTERNS OF USE

The Choreographer is a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in dance; linked with other AEP packages which are related to art, music, drama, and literature and which are clustered around "Aesthetics and the Artist"; or used with physical development programs.

ASSESSMENT PROVISIONS

Throughout the activities student learning is assessed informally by both teacher and students. Appropriate guidelines for assessment are built into the Teacher's Guide. A task checklist included in the last activity guides students in evaluating their own creative work.

TIME REQUIREMENTS

The Choreographer takes about ten hours to complete. The activities are divided into 45 minute sessions.

IMPLEMENTATION PROCEDURES

The Choreographer does not require a specialist teacher. The activities are designed for large-group instruction. A large amount of clear floor space is needed for the movement explorations. The Teacher's Guide carefully outlines all procedures and gives explicit instructions in conducting the movement activities.

The Choreographer encourages the teacher to extend the concepts in the package by having her students attend a dance concert, or inviting local choreographers and dancers to pay a visit to the school; by watching for television programs on dance; by renting films on dance to show to students; and by suggesting an included bibliography on dance to students.

Based on our information of the durability of materials in this prototype package, we plan to make those in the published version equally as durable.

MATERIALS, EQUIPMENT, AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student Materials:				
3 student books	1 set per 6 students	*	Idea sheets consumable yearly	
1 pad of idea sheets (30 per pad)				
3 secret-word decks				
Movement cards				
Teacher Materials:				
1 Teacher's Guide		*		
1 Choreographer tape				
1 Sound tape				

*Materials still in prototype stage; costs not yet determined.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

This set of materials has completed its first classroom trial (hothouse). Pilot trials of the materials are now being conducted in three separate classrooms of widely varying ethnic and socio-economic characteristics. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from classroom trial must indicate that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package.

After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information on the utilization of the published version of the packages on a yearly basis.

Results from the observations, testing, and teacher interview during the hothouse trial indicated that no major reconceptualizing or content revisions were necessary; the package generally achieved its own goals and those of the Aesthetics and the Artist series. Both students and teachers exhibited a high degree of involvement and satisfaction with the materials; however, these conclusions must remain tentative until testing at the three pilot sites is completed. The Choreographer materials were revised following the hothouse trial and will be revised again in light of the data obtained from the pilot trials.

AVAILABILITY

The anticipated completion date of The Choreographer is November 1975. The package is copyrighted.

INFORMATION CURRENT AS OF MARCH 1975

Evidence to Support Assurances and Claims for The Choreographer

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1972). This source explains the standard procedures followed in the development and evaluation of this product. A Plan for the Hothouse Testing of Aesthetic Education Program Packages (Hall and Thuernau, 1974) explains this phase of evaluation in greater detail. As employed by the Aesthetic Education Program, hothouse evaluation consists of intensive observation of package activities in a single classroom trial. A Plan for the Pilot Testing of Aesthetic Education Program Packages (LeBlanc, 1974) explains the pilot test phase of evaluation in greater detail. As employed by the Aesthetic Education Program, pilot evaluation consists of trial of the materials in three classroom settings of varying ethnic and socio-economic characteristics. Instrumentation tailored to the measurement of package objectives is developed and utilized in an experimental or quasi-experimental design with treated and control group classes.

A preliminary report on the results of the hothouse trial is available. The complete hothouse report is being drafted. The materials are currently undergoing pilot testing which is expected to continue into April 1975.

NIE PRODUCT: THE COMPOSER
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional Educational Laboratory, Inc.)
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Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Edward Sweda, Product Developer

NARRATIVE DESCRIPTION

This set of instructional materials, one of the Aesthetics and the Artist series of Five Sense Store packages, introduces students to composers as the originators of music. The students learn that composers are real people, individuals who have all kinds of ideas about sounds and are able to express their ideas for others to hear and/or perform. Students will see that a composer may be a primitive person in some distant land chanting to a self-made instrument in preparation for a tribal ceremony or may be a member of a technological society creating a composition for hundreds of performers or using electronic devices. The students will understand that the unifying factor between both efforts is the organizing of sounds for others to hear.

This package asks the students to focus on their own personal creative process and to apply their findings to the making of music. For this purpose, the students will participate in a game where they respond to cue cards which suggest an incident, a word, or an object. The students then translate their responses into musical meaning and share this meaning as the musical creator does. Through various media, the students will meet composers who explain what they do and how they go about doing it.

Throughout the set of materials, students will explore notation, instrumentation and other elements which constitute the art of composing. The students will hear and see various other systems, including the standard system of composition. A slide-tape presentation is used to demonstrate symbols, systems, and visual representations of the sounds which the students will hear in the presentation. The students will create their own symbol system which will be used to record their own sound ideas for others. Students will also be encouraged to select the instrumentation which will be used in expressing their sound ideas.

Throughout The Composer it is emphasized that the students can create compositions reflecting their personal decisions and feelings about sound, and that these compositions can be performed by others.

Sample Lesson
(Addressed to Teachers)

Lesson 3. An Impromptu Composition Period

Procedure: The beginning of this experience draws heavily on the teacher's willingness to portray the role of a composer. This portrayal simply attempts to illustrate for the class a thought process which could be used to create a sound composition. It's as simple as watching sentences evolve into a paragraph and then, hopefully, into a personal literary statement. Except in this case you substitute sounds for words or you add sounds to your words. Surely, we all have tucked away a little sound ditty which can be claimed as our own. With a slight touch of theatre share your sound ideas with the class. Have fun!

After you feel that the role of a composer has been adequately portrayed by you, organize the students into teams of five. After the teams have been organized, distribute randomly to each team two or three sound idea cards. Ask the teams to look at the visuals and read the statements on the back of each card. Explain that these cards may give them some ideas about sounds for their compositions. Before the whole group is divided into team planning huddles, have each team show the others which card the team has chosen as a sound idea card for their composition. At this point they may even wish to give a hint as to what may happen.

Next, allow the teams to meet and plan separately. Tell students that each team must have a composer, performer and conductor. Tell them also that it is the composers who come up with the sound ideas for their teammates to conduct and perform. They have to designate what each performer will do, and with what (voice, instruments, etc.). The audience role will be filled by the other teams.

As the individual teams are planning in various parts of the classroom, the teacher should visit with each team as they work towards their sound event.

Setting up the teams:

Who is the composer here?
How many performers are you going to use?
Are you going to use instruments?
Or are you going to use only voices?
Your compositions don't have to be very long.
If you have a better idea than the card, use it!

Getting Ready for the Sound Event:

When all teams have finished planning their compositions, let the performances begin. The performing team's composer first shows the "audience" what his idea card was, and then the conductor and performers proceed.

SUBJECT AREAS

Aesthetics and the Artist: Music

The composer as originator of music; the organizing of sounds for others to hear as the artistic endeavor of the composer; exploration of the creative process engaged in by the composer; notation as a method of transmitting sound ideas created by composer; creation of student compositions.

INTENDED USERS

The Composer, now in the development stage, is being designed for use by fourth and fifth-grade students. As with the other packages in the Aesthetics and the Artist series, it will be suitable for sixth and seventh-grade students as well.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package is for students 1) to discover who composers are and what the process is which enables them to create sound ideas; 2) to become aware that the sound ideas of composers are transmitted to performers and listeners through a standard symbol system; 3) to devise their own symbol system as a means of understanding the creative process of professional composers; 4) to be able to express their own ideas about sound compositions.

PATTERNS OF USE

The Composer is a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in music; linked with other music-based packages developed by the Aesthetic Education Program; or linked with other AEP units which are related to drama, art, dance, film, and literature and which are clustered around "Aesthetics and the Artist."

ASSESSMENT PROVISIONS

Informal assessment provisions are interspersed throughout the activities. Learning is assessed by teacher and student. Guidelines to aid the teacher in assessing student performance are built into the package.

TIME REQUIREMENTS

The Composer takes approximately ten hours to complete.

IMPLEMENTATION PROCEDURES

The Composer will not require a specialist teacher. The individual lessons require both large group and small group instruction.

Based on the information received during the testing process, materials will be designed to be extremely durable. Consumables will be minimal and easily purchased from the publisher.

MATERIALS, EQUIPMENT, AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student materials	*	*		
Student book				
Student composing charts				
Idea cards				
Teacher materials:				
16mm. film		*		
Sound tape				
Teacher's Guide				

*The materials are still in the prototype stage. Therefore, packaging and cost determinations have not yet been made.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training in music will be able to implement this instructional package. Workshops are offered by the publisher and by CEMREL, and curriculum consultation is also offered by CEMREL. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

At this point, the materials have received a preliminary (hothouse) evaluation based upon daily observation of trial in one classroom. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from hothouse trial suggests that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide. The materials are being revised in preparation for pilot trial.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information on utilization of the published version of the package.

At this time, only the hothouse trial has been completed. Information received as a result of this trial has confirmed that this package merits continued development. Necessary revisions are being made, and the package will be advanced to pilot trial.

AVAILABILITY

The anticipated completion date of The Composer is November, 1975. The package is copyrighted.

INFORMATION CURRENT AS OF MARCH 1975.

Evidence to Support Assurances and Claims for The Composer

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1969, 1972), and the Supplement to the Basic Program Plan, Aesthetic Education Program (CEMREL, 1973).

These sources explain the standard procedures followed in the development and evaluation of this product. A Plan for the Hothouse Testing of Aesthetic Education Program Packages (Hall and Thuernau, 1974) explains this phase of evaluation in greater detail. As employed by the Aesthetic Education Program, hothouse evaluation consists of intensive observation of package activities in a single classroom trial. A Plan for the Pilot Testing of Aesthetic Education Program Packages (LeBlanc, 1974) explains the pilot test phase of evaluation in greater detail. As employed by the Aesthetic Education Program, pilot evaluation consists of trial of the materials in three classroom settings of varying ethnic and socio-economic characteristics. Instrumentation tailored to the measurement of package objectives is developed and utilized in an experimental or quasi-experimental design with treated and control group classes. A hothouse report has been prepared and is available on The Composer.

NIE PRODUCT: THE FILMMAKER
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional
Educational Laboratory, Inc.)
3120 59th Street
St. Louis, Missouri 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
John Porter, Product Developer

NARRATIVE DESCRIPTION

This set of instructional materials, part of the Aesthetics and the Artist series of Five Sense Store packages, explores who filmmakers are, where they get their ideas, how they plan and develop their ideas, and what they must know and do to create films.

The materials provided in the package engage the students in activities and experiences designed to increase their perceptions of filmmakers as people and creators. The students participate in the process of making decisions used to create a film--the same process filmmakers use. Students move from the discovery and selection of an idea, through the initial stages of its development, to the making of creative, technical decisions which achieve the effects needed to express the chosen idea.

The materials involve students in three kinds of explorations. First, the students see a selected sequence from the film "How Does A Rainbow Feel?" Afterwards they briefly discuss the story of the film. Following the discussion, they see and hear a slide-tape presentation in which they meet the filmmaker, director David Holden. He tells them about himself and about the creation of the film they have just seen. Holden talks about the filmmaker as a person in the everyday world, about where ideas for films are obtained, about how the idea for a selected sequence originated, and about how the sequence was planned. The slide-tape presentation also introduces the students to the people a filmmaker works with and explains how these people contribute to creating the effects that communicated the chosen idea.

The contents of the student book are organized in the same sequence filmmakers follow in creating a film--from conception of the idea, through the planning of the idea's expression, to the making of creative technical decisions, and finally to the editing stage, where the film pieces are selected and sequenced to help express the chosen idea. The book is very graphic, containing many photographs of filmmakers at work and stills from selected films. Also included in the book are quotes from filmmakers and an interview with Alfred

Hitchcock in which Hitchcock describes the process he uses in creating films. Throughout the set of materials, the students engage in activities similar to those filmmakers use in creating a film.

The concluding lesson provides options for the students to engage in the total creative process of filmmakers. They can experience selecting an original idea, thought, or feeling, planning a way of expressing it on film and showing the expression to an audience.

Sample Lesson
(Addressed to Teachers)

Activity 3: Combining Flip Books

Purpose and General Description: The purpose of this activity is to reinforce the material on motion and idea introduced before and to introduce the concept that increasingly complex ideas can be communicated by adding and arranging images. For this purpose the students will share with each other the flip books they created in Activity 2 and will investigate the potentials of putting together a number of flip books to express a new and more complex idea.

Procedure: Have the students share with each other the flip books they created in Activity 2. Tell them that as they show their flip books, they should tell the idea they chose to express. Then they should flip the pages to show the images they selected to express their idea. They might flip their books quickly once, creating the illusion of movement, and then show the pages slowly, so that the other students can easily see the changes from image to image.

Ask them to talk about which flip books could be put together to express a new, longer idea. The combined flip books may actually become something like a story.

As the students begin making choices about which flip books to put together and about what order to arrange them in, encourage them to try out different orders. Point out that, in these ways, they are creating new and more complicated ideas.

Here is an example of how the activity might work. One student may have chosen in Activity 2 to create a flip book in which a ball rolls across the pages, one may have created a moving car, another a clock with hands that move, and still another to show the occurrence of an explosion.

The students might decide to combine these flipbooks in any of the following ways:

1) ball chasing car, clock hands moving, explosion
2) car chasing ball, clock hands moving, explosion

3) clock hands moving, car and ball moving, explosion
4) explosion, ball and car moving, clock hands moving.

When the students have made their choices, staple together the selected pages from the flip book pads.

See that all of the students have a chance to flip through the new combinations.

You might conclude this activity with a brief discussion based on questions such as the following:

"Did you like any of the combinations better than other"? Why?"
"What ways have we found that we can make a simple idea more complex?"
(combine ideas; arrange ideas in various orders)

SUBJECT AREAS

Aesthetics and the Artist: Film

Exploration of who filmmakers are and where they get their ideas; idea that movement in film is an illusion and how it is created; basic structural elements of film--shot, scene, sequence--and how filmmaker manipulates these to achieve a desired effect; process of planning and decision making used to create a film; how films are edited; involvement in actual process of making a film.

INTENDED USERS AND BENEFICIARIES

The Filmmaker is being designed for fourth and fifth grade students. As with the other packages in the "Aesthetics and the Artist" series, it will be suitable for sixth, seventh, and eighth grade students.

GOAL(S) OR PURPOSE(S)

The goals of The Filmmaker are for students 1) to perceive filmmakers as persons in the everyday world and as artists creating within their chosen medium; 2) to discover that the sources for filmmakers' ideas and for their own ideas are the same; 3) to explore the relationship between the visual, aural, and kinetic nature of film and how it is used by filmmakers to express ideas; and 4) to experience the process filmmakers use in creating a film.

PATTERNS OF USE

The Filmmaker, now in the prototype stage, will be a self-contained instructional package with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in film arts or linked with other AEP packages which are related to music, art, dance, drama, and literature and which are clustered around "Aesthetics and the Artist."

ASSESSMENT PROVISIONS

Assessment for the learning activities will be designed during development of the instructional unit.

TIME REQUIREMENTS

The Filmmaker will take approximately 15 hours to complete. There are 18 activities which are of varying lengths of from thirty minutes to two hours.

IMPLEMENTATION PROCEDURES

The Filmmaker will not require a specialist teacher. The various activities call for differing methods of instruction. Sometimes the students work independently and other times they work in groups.

MATERIALS, EQUIPMENT AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student Materials:				
Student books Pieces of film Flip book pads Planning card games Story board sheets Captain Cinema comic books Viewfinder sheets	1 set per 6 students	*	Flip book pads, story board sheets, and viewfinder sheets consumable yearly	
Teacher Materials:				
Sequence from a film Filmstrip and recorded sound track Teacher's Guide		*		

*Materials are still in prototype stage. No costs have been determined,

Personnel Required for Product Adoption and Implementation

The classroom teacher without special training will be able to implement this instructional package. Workshops are offered by the publisher and by CEMREL. Curriculum consultation is also available from CEMREL. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

The instructional unit, The Filmmaker is presently in development. When completed it will be tested as defined in the Basic Program Plan 1972. At that time appropriate assurances and claims will be made.

AVAILABILITY

The anticipated completion date of The Filmmaker is November, 1975. The package is copyrighted.

INFORMATION CURRENT AS OF MARCH 1975

NIE PRODUCT: THE CRITICAL AUDIENCE
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional
Educational Laboratory, Inc.)
3120 59th Street
St. Louis, Missouri 63139

Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Bennett Tarleton, Product Developer

NARRATIVE DESCRIPTION

This set of instructional materials, one of the Aesthetics and the Artist group, explores the world of the artist's receiver, the audience--the people who respond to artists' works, who try to understand why artists create dances, musical compositions, stories, etc., and who attempt to learn where artists get their ideas. In this respect, the set of materials serves as a culminating or companion set to the other materials in this series. Activities ask students to become more aware of themselves as responders. Students are to begin with honest reactions about how particular works of art make them feel, then try to determine why they feel that way and, over a period of time, see if their responses remain the same. If they do, why? If not, why not? Through activities in the classroom and out-of-class experiences, the students begin to analyze and judge artistic works by answering questions about the artist's possible intent, whether or not he or she succeeded in that intent, and whether or not the effort was worthwhile. Both through hearing other student's reactions and professional critics' reactions, the students discover a range of possible responses to any given artistic work. The professional critics are included as members of the community of responders, and will not be the center of attention in the materials. Rather, the focus of the materials will be on students as responders, as growing members of the critical audience, an audience that is constructively aware and responsive to the creator and the creation.

Sample Lesson

The Critical Audience is now in the conceptualization and activities-planning stage. Therefore, no sample lesson will be included here.

SUBJECT AREAS

Aesthetics and the Artist: Art, Dance, Drama, Film, Literature, Music

Focus on forms in art works; analysis of responses to works of art; learning of skills of responsible criticism.

INTENDED USERS AND BENEFICIARIES

The Critical Audience is being designed for fourth and fifth-grade students. As with all the packages in this series, however, it will be suitable for sixth, seventh, and eighth-grade students, as well.

GOAL(S) OR PURPOSE(S)

The goals of this instructional package are for students 1) to become aware of themselves as members of the community of responders without which art works would exist in a vacuum; 2) to recognize that their active participation is crucial to energize the interaction between creator/creation and responder; 3) to learn that within the community of responders are professional critics whose ideas about their work may be of value to the students in evaluating their own aesthetic experiences; and 4) to begin to use critical skills (perceiving, analyzing, judging) to evaluate works of art within the classical critical structure.

PATTERNS OF USE

The Critical Audience will be a self-contained unit of instruction. It may be used as part of an ongoing curriculum in any of the arts disciplines or linked with other AEP packages which are related to music, art, drama, dance, and literature and which are clustered around "Aesthetics and the Artist."

ASSESSMENT PROVISIONS

Assessment for the learning activities will be designed during development of the instructional unit.

TIME REQUIREMENTS

As this package is still in the developmental stage, specific time requirements have not yet been determined.

IMPLEMENTATION PROCEDURES

The Critical Audience will not require a specialist teacher. Other information concerning the implementation of the package is not available at this time.

MATERIALS, EQUIPMENT, AND PERSONNEL REQUIREMENTS

As the activities in The Critical Audience are still in the developmental stage, no materials have been decided upon.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training will be able to implement The Critical Audience. Workshops will be offered by the publisher and curriculum consultation will be available from CEMREL.

ASSURANCES AND CLAIMS

The instructional unit, The Critical Audience is presently in development. When completed it will be tested as defined in the Basic Program Plan 1972. At that time appropriate assurances and claims will be made.

AVAILABILITY

The anticipated completion date of The Critical Audience is November, 1975. The package is copyrighted.

INFORMATION CURRENT AS OF MARCH 1975

NIE PRODUCT: THE VISUAL ARTIST
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
(Formerly Central Midwestern Regional
Educational Laboratory, Inc.)
3120 59th Street
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Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Jerilynn Kupferberg, Product Developer

NARRATIVE DESCRIPTION

This set of instructional materials, one of the Aesthetics and the Artist group of Five Sense Store packages, introduces students to the visual artist as a real person whose chosen work is creating visual images based on his perceptions, skills, personality, and experiences. The visual artist has responsibilities, commitments, and the same basic needs (food, clothing, and shelter) as other individuals. The visual artist communicates his experience and feelings by selecting and shaping visual elements into a whole work. The quality that separates him from other artists is that he organizes, interprets, and communicates his perception of the environment in a visual mode. This quality is something that all visual artists have in common. Their choice of media and style is where they differ.

Visual perception consists of four types of vision: practical, curious, imaginative, and aesthetic. In the process of creating visual images, the artist may perceive his environment through all four types of vision, whereas most individuals will stop at the practical or curious level.

The emphasis of the package will be on the artist's perception and interpretation of his environment through visual images. There will be an opportunity for the students to hear interviews with four artists, Marisol, Robert Indiana, George Segal, and Richard Hunt, in order to better understand what motivates them and how they live and work. An introduction to the visual artist will include a book of visuals which will show the relationship of the artist's work to his environment, sound tapes through which the artists communicate directly with the students, manipulatives, and an activity booklet. The activities in the booklet will reinforce the concepts of the materials and give the students the opportunity to put themselves in the role of visual artists.

Sample Lesson

Lesson Three: Artists Make Decisions
(For the teacher)

Concept: Visual artists communicate their experiences and feelings by selecting and organizing visual elements into a whole work.

Objective of the Lesson: After they have completed this lesson, students should be better acquainted with the decision-making process that artists go through when they organize and reorganize visual images. Students should also be more aware of their own decisions, i.e., why they choose the lines, colors, shapes, and textures that they use; why they use more of one than another; how they use these elements to express their ideas.

(For the students)

Getting Acquainted

When artists are in the process of creating works of art, they have to make many decisions. In order to put together an idea and express their feelings, they have to decide what kinds of lines, shapes, colors, and textures would go together. They must decide how to arrange them. Sometimes they arrange their ideas many times before they find a combination that works for them. They will sometimes do many drawings before they put together a final work of art. Sometimes artists do not plan ahead; they just experiment with their materials, making decisions as they work until they work out something that pleases them and expresses their idea. An accident might happen and the artist may decide to make it an important part of the final work. Artists are always making decisions.

WORKING FROM A PLAN

Exploring and Imagining

Get out the black and white puzzle and the colored puzzle. Choose the one you want. You will use the puzzle parts to make a plan for a picture. Try using both puzzles.

Planning and Doing

Pick any card from the Artist's Idea Pack. Arrange the puzzle parts in a way suggested by the idea you pick. Experiment with the parts until you find something you like. You may have to make many decisions until you decide exactly what you want your picture to look like.

After you finish your puzzle plan, you are now ready to make your picture. Find some drawing materials, paint, or magazines, scissors, and glue and make a picture of your puzzle plan.

Remember how the artists talked about their work. You may also want to write a story talking about how you planned and made your picture in the same way. Think about all the decisions you made, and tell about them in your story. Do this activity more than once.

Showing and Sharing

Share your picture and your story with your teacher, parents, and classmates.

SUBJECT AREAS

Aesthetics and the Artist: Visual Art

How perceptions, skills, personality, and experiences contribute to an artist's creation of visual images; where the visual artist gets ideas; how the artist organizes visual elements in a whole work to communicate experiences and feelings; how different experiences and knowledge of individuals lead to different reactions and feelings about the same work of art.

INTENDED USERS AND BENEFICIARIES

The Visual Artist was formally tested with fifth-grade students. It is suitable for students from fourth to eighth grade.

GOAL(S) OR PURPOSE(S)

The purposes of this instructional package are for students:

1. to become more aware of things they see around them;
2. to investigate their own powers of observation and perception;

3. to learn how the artist perceives the world around him;
4. to develop a general idea of how artists interpret their perceptual experiences through their art forms;
5. to understand that, like artists, they create different products from the same ideas;
6. to acquire an understanding of how personal characteristics are evidenced in art.

PATTERNS OF USE

The Visual Artist is a self-contained unit of instruction with activities that are sequential and cumulative. It may be used as part of an ongoing curriculum in art; linked with other AEP packages which are related to music, drama, dance, and literature and which are clustered around "Aesthetics and the Artist"; or used with perceptual development programs.

ASSESSMENT PROVISIONS

While there are no formal tests, student learning is assessed by both teacher and students. Analysis of student products and of their oral responses are the basic means of evaluating their learning. Guidelines for the evaluation are in the Teacher's Guide.

TIME REQUIREMENTS

The Visual Artist takes approximately 20 hours to complete. The time required for the activities varies with each one.

IMPLEMENTATION PROCEDURES

The Visual Artist does not require a specialist teacher. Students work in pairs through the package. The activities can be completely individualized and self-paced, or they can be done together in a large group. Or if the teacher prefers, a combination of the two methods may be used. A large display area for student work is needed. The Teacher's Guide outlines all procedures in a careful and interesting way. It has been rated as both very useful and original [illegible] testing situations.

The materials in The Visual Artist are now in prototype stage. Based on the information in test situations about the durability of materials, we will design those in the final to be as durable as possible.

MATERIALS, EQUIPMENT, AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student Materials: 3 student books, A Special Place 3 student activity books 3 sets of Artist's Idea Packs (3 card decks in each set) 3 sets of Artist's Planning Puzzles (2 in each set) 1 shape bag 1 pad student response sheets (30 in each pad)	1 set per 6 students	*	Student response sheets consumable yearly.	
Teacher Materials: 1 artists' interview tape 1 filmstrip 1 Teacher's Guide		*		

*Materials in The Visual Artist are still in prototype stage. Therefore, no prices have yet been determined.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

The information gathered from hothouse trial of the materials indicates that the package can stand alone in the hands of a competent teacher and be successfully implemented without additional aid beyond that given in the Teacher's Guide. The developers have not received any reports of harm associated with the use of this product.

Packages are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such material in the package causes an appropriately directed review of the materials by a qualified person from outside of the program. The materials are revised to eliminate such shortcomings.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves an an early warning system for the detection of any intrinsic shortcomings of the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information about the utilization of the published version of the packages on a yearly basis.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

A pre-publication version of this package has been tested in one local classroom containing students from grades 4, 5, and 6 and from a mixture of socio-economic levels. No quantitative data yet exists concerning student learning but the students indicated a high degree of satisfaction with the package in post-package questionnaires. Based on recommendations from the teacher and an evaluator, the package is undergoing revision and is being continued in the testing cycle.

AVAILABILITY

The anticipated completion of The Visual Artist is November, 1975. The package is copyrighted.

INFORMATION CURRENT AS OF MARCH 1975

Evidence to Support Assurances and Claims for The Visual Artist

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1972). This source explains the standard procedures followed in the development and evaluation of this product. A Plan for the Hothouse Testing of Aesthetic Education Program Packages (Hall and Thuernau, 1974) explains this phase of evaluation in greater detail. As employed by the Aesthetic Education Program, hothouse evaluation consists of intensive observation of package activities in a single classroom trial. This package will proceed to the pilot stage. A Plan for the Pilot Testing of Aesthetic Education Program Packages (LeBlanc, 1974) explains the pilot test phase of evaluation in greater detail. As employed by the Aesthetic Education Program, pilot evaluation consists of trial of the materials in three classroom settings of varying ethnic and socio-economic characteristics.

A hothouse evaluation report was prepared on The Visual Artist which includes the assessments of the evaluator and the teacher and their recommendations for modifications.

Effectiveness:

Students were asked to compare their preference for the package with other subjects. In all cases but one (physical education), they preferred the instructional units to other subjects. The results are summarized on Table 1 of the appendix to the hothouse report.

TABLE 1

Activity	Response						Activity
	← Preferred		Neutral		Preferred →		
	n	%	n	%	n	%	
Visual Artist	5	.20	8	.33	11	.45	Physical Education
Visual Artist	7	.29	13	.54	4	.16	Music
Visual Artist	9	.37	8	.33	7	.29	Reading
Visual Artist	12	.50	6	.25	6	.25	Art
Visual Artist	13	.54	6	.25	5	.20	Social Studies
Visual Artist	13	.54	8	.33	3	.12	Creative Writing
Visual Artist	13	.54	4	.16	6	.25	Science
Visual Artist	14	.58	6	.25	4	.16	Mathematics

from Appendix to "Hothouse Report: The Visual Artist" (April 1975)

NIE PRODUCT: WRITERS: POETS, STORYTELLERS, AND PLAYWRIGHTS
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
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NARRATIVE DESCRIPTION

This set of instructional materials, one of the Aesthetics and the Artist group of Five Sense Store packages, introduces students to three different kinds of writers--poets, storytellers, and playwrights. The purpose of the materials is to develop the students' knowledge of the creative process through a study of the writer's relationship to his or her work. The materials are not intended to train students to be writers, although such training is a natural outgrowth of working with these materials which include a Creative Writing File Box. The students' understanding of the creative process is made more realistic as they work on their own short pieces of prose, poetry and drama.

The materials involve students in various kinds of learning experiences. Students meet several writers via a student book, slide-tape presentations, recorded interviews and printed interviews. They learn about these writers' interests, experiences, and attitudes.

The students see that writers, talented though they may be, are individuals involved with human as well as artistic concerns, and that some of these concerns affect how the writer creates and what he or she produces. Further, as students proceed to reading the writers' works, they learn that the finished pieces of writing do not miraculously appear on the page, but are the result of the fascinating and sometimes frustrating creative process. In discussion, the students perceive and describe this creative process as it has actually shaped the finished piece of prose, poetry, or drama. They read comments and pieces by other writers working in the same form and see that the process varies, though each writer uses the same tools--words. They are introduced to some technical terms, such as characterization and conflict, and perceive that the writer manipulates these elements according to her or his own needs.

During the final portion of each lesson, when the students try to express their own ideas in writing, they experience first-hand the challenge and excitement of the creative process. In the final activity, students produce books of their own writings or create together a group book of their writings.

Sample Lesson
(Addressed to Teacher)

Lesson Three: Sources of Some Playwright's Ideas

General Description: In this activity, the students learn how three playwrights conceived ideas for plays. They then try to use the method one playwright used to start writing.

Procedure: Tell the students that, of course, not every writer goes about his work in the same way, and that they will read how three famous playwrights got started. Director the students to the pictures and short biographies of the playwrights.

Reading and Discussing Comments by Playwrights: As the students read the short commentaries, encourage them to consider the playwrights' words carefully. Does any part of any story surprise them? Are they surprise, for instance, that Brown wrote his play first as a poem? Have they read any poem in this book that might be turned into a play? (Peri Dwyer's "Compliance" suggests itself, since the described the situation that the poem depicts.)

Creative Writing Activity: Read with the class the following directions.

(Addressed to Students)

Now you try it. Think of a person whom you might write a play about. Choose someone you like to think about, someone you find interesting or curious. To create a story-idea, think of the most improbable or unlikely thing this person might do, just as Joseph Kisserling did in creating "Arsenic and Old Lace." Don't try to write the whole play now. Choose the character and make up the story-idea first. That's how a playwright begins his or her play.

SUBJECT AREAS

Aesthetics and the Artist: Literature

Introduction of three different kinds of writers--poets, storytellers, playwrights; how human as well as artistic concerns of the writer affect the way in which he creates and what he produces; fascination and frustration of the creative writing process; introduction of terms "characterization" and "conflict" and the way individual writers manipulate these elements; actual process of creative writing by students.

INTENDED USERS AND BENEFICIARIES

This instructional package is being designed and formally tested with fifth and sixth-grade students. It can easily be used with eighth and ninth graders as well.

GOAL(S) OR PURPOSE(S)

The goals of Writers: Poets, Storytellers, and Playwrights are for students 1) to perceive the writer as an individual with everyday human, as well as artistic, concerns; 2) to perceive how the creative process works, and the relationship of an individual writer's creative process to his or her work; 3) to perceive that the creative process varies from writer to writer; 4) to perceive that different writers get very different ideas from the same sources; 5) to acquire the necessary critical insight into the creative process and language for such analysis and judgement that they are able to analyze and judge literary works; 6) to break down stereotypes in students' minds about writers; 7) to produce their own pieces of writing, thus intensifying their understanding of the creative process.

PATTERNS OF USE

Writers: Poets, Storytellers, and Playwrights is a self-contained instructional package. It may be used as part of an ongoing curriculum in literature; linked with other AEP units which are related to music, art, dance, and drama and which are clustered around "Aesthetics and the Artist;" or used with creative writing programs.

ASSESSMENT PROVISIONS

Informal assessment provisions are interspersed throughout the activities. Learning is assessed by teacher and student. Guidelines to aid the teacher in assessing student performance are built into the package.

TIME REQUIREMENTS

Writers: Poets, Storytellers, and Playwrights takes about 22 hours to complete. The 16 activities take from 30 minutes to 3 hours to complete and can be broken down into smaller class sessions.

IMPLEMENTATION PROCEDURES

Writers: Poets, Storytellers, and Playwrights does not require a specialist teacher. It is being tested with fifth and sixth-grade students, but it can be used with students in seventh, eighth, and ninth grades as well.

MATERIALS, EQUIPMENT AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Student Materials:			Publication format sheets replaceable yearly	
Student activity book	*	*		
Package library of specific readings				
Publication format sheets				
Teacher Materials:				
Sound filmstrip				
Cassette tapes		*		
Teacher's Guide				

*Materials are still in prototype stage. Packaging and cost decisions have not yet been made.

Personnel Required for Product Adoption and Implementation

A classroom teacher without special training can implement this instructional package. Workshops are offered by the publisher, and curriculum consultation is available from CEMREL. Costs for these services can be obtained from each organization.

ASSURANCES AND CLAIMS

Assurances

At this point, the materials have received a preliminary (hothouse) evaluation based upon daily observation of trial in one classroom. The developers have not received any reports of harm associated with the use of this product.

Materials are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such shortcomings in the materials is resolved by an appropriately directed review of the materials by a qualified expert outside the program. The materials are revised to eliminate any deficiencies identified in the review.

Information gathered from hothouse trial suggests that the materials can stand alone in the hands of a competent teacher and be successfully implemented with no aid beyond that given in the Teacher's Guide. The materials are being revised in preparation for pilot trial.

Claims

The major claim to be made about the Aesthetic Education Program's instructional materials is that they represent the only comprehensive curriculum resource based on the arts that has been developed in the United States using the carefully defined and implemented development and evaluation procedures basic to the concept of an educational development laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development trained observers carry out an observational monitoring of a trial implementation of the package in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second, pilot stage, evaluation is carried out in three classrooms. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher. Third, the materials must meet certain short-term payoff objectives, demonstrated by verification of measurable differences in the behavior of the students who have studied the materials. After the pilot trial of the materials, the program has continued to gain information on utilization of the published version of the packages on a yearly basis.

At this time, only the hothouse trial has been completed. Information received as a result of this trial has confirmed that this package merits continued development. Necessary revisions are being made, and the package will be advanced to pilot trial.

AVAILABILITY

The anticipated completion of *Writers: Poets, Storytellers, and Playwrights* is November, 1975. The package is copyrighted.

INFORMATION CURRENT AS OF MARCH 1975

Evidence to Support Assurances and Claims for Writers: Poets, Storytellers, and Playwrights

Careful Development:

Assurances and claims of careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1969, 1972), and the Supplement to the Basic Program Plan, Aesthetic Education Program (CEMREL, 1973).

These sources explain the standard procedures followed in the development and evaluation of this product. A Plan for the Hothouse Testing of Aesthetic Education Program Packages (Hall and Thuernau, 1974) explains this phase of evaluation in greater detail. As employed by the Aesthetic Education Program, hothouse evaluation consists of intensive observation of package activities in a single classroom trial. A Plan for the Pilot Testing of Aesthetic Education Program Packages (LeBlanc, 1974) explains the pilot test phase of evaluation in greater detail. As employed by the Aesthetic Education Program, pilot evaluation consists of trial of the materials in three classroom settings of varying ethnic and socio-economic characteristics. Instrumentation tailored to the measurement of package objectives is developed and utilized in an experimental or quasi-experimental design with treated and control group classes. An Overview of Development and Evaluation of the Five Sense Store (Edwards, 1974) explains the procedure through which the program continues to gather information on products which have passed the pilot stage of evaluation. A hothouse report is currently in preparation and will be made available on this package.

E. Aesthetics and the Culture Series

Summary Statement: Aesthetics and the Culture Series (Grades 5-6)

Objectives:

To identify major concepts, approaches of study, objectives, and alternate solutions to the problems of analysis and selection of curriculum content for aesthetic education applicable to the overall concept Aesthetics and the Culture for grades 5-6. To implement the development trial teaching, and revision of units of instruction in this area by preparation of six multi-media instructional materials.

Description:

In these materials students explore the relationship between aesthetic values and different cultures. Each set of materials presents the aesthetic values of a particular culture. Students gain an understanding of these values as they emerge in art form/event/ritual. Materials in the series introduce students to the link between aesthetic values and other values related to societal tradition, political history, religion, etc. Together the materials offer evidence that each culture has identifiable aesthetic values which may differ from those of other cultures.

Instructional units in this Series include:

The Arts of Yorubaland	5 & 6
Symbols of Ancient Mexico	5 & 6
American Popular Culture	5 & 6
A Sense-ational Tour through Russia	5 & 6
American Indians: The People of Earth and Sky	5 & 6
untitled set of materials	5 & 6

Outcomes:

The student understands that each culture has its own aesthetic values.

The student perceives, describes, and analyzes the aesthetic values of different cultures.

The student engages in art form/event/ritual activities which exemplify the aesthetic values of different cultures.

The student understands that the aesthetic values of different cultures are closely related to the other values of those cultures.

The student understands that different cultures have different aesthetic values.

Status Report: As of November 30, 1975, three sets of materials (The Arts of Yorubaland; Symbols of Ancient Mexico; A Sense-ational Trip through Russia) will be in the testing cycle. Two sets of materials (American Popular Culture; American Indians: The People of Earth and Sky) will be ready for testing. (The content of another set of materials has not yet been determined.)

Series Products: "The Aesthetics of Culture: A Position Statement" by Morris Weitz.

The following information describes each instructional unit in more detail.

THE ARTS OF YORUBALAND

This set of instructional materials, one of the Aesthetics and the Culture series, introduces students to the traditional arts of the Yoruba peoples of southwestern Nigeria; develops in the students an awareness of the aesthetic considerations which shape the arts of these peoples; and leads them to an understanding of the special meanings and functions of these arts.

The traditional cosmology, or world view, of the Yoruba people of southwestern Nigeria is expressed in their myths, art, music, and dance. Their art reveals to us their heritage--an African heritage, a heritage that is both unique and universal.

The Yoruba, like many African peoples, believe in life forces which pervade all things--forces which appear contradictory but are really complementary. There is a constant interplay of life forces--good and bad, beautiful and ugly, order and disorder. The harmonizing of life forces is sought by each individual working within the framework of the community.

Two major forces, the forces of order and disorder, are represented by Orunmilla, the god of fate, and by Eshu, the trickster. The arts of the Yoruba reflect the belief in the opposing forces of order and disorder and reveal how society ought to operate in order to bring about a balance between the forces affecting people's lives.

The arts have a special meaning and function in the world of the Yoruba people and are an integral part of their lives. They fuse past and present as they remind people to show respect for the past by honoring the gods, the ancestors and the elders in order to insure the continued life of the community and to bring balance and order to the world.

The students work primarily with a text and tapes. They examine the myths, art, music, and dance of the Yoruba to understand how aesthetic elements which shape Yoruba art satisfy the aesthetic values of that society and express beliefs and ideas that are shared by the whole community.

The materials introduce students to the oral tradition and visual art of Yorubaland and to the ideas and beliefs which give special meanings to those art forms. Students explore how these art forms function in maintaining and clarifying community values. The students become aware of the concept of style by comparing and contrasting their own works of art with Yoruba visual art and the visual art of other African peoples.

Students become aware that all of the arts of Yorubaland--the myths, art, music, and dance--have special meanings and functions which convey ideas and beliefs which are shared by the community and which serve to affirm their world view. Students examine masks and dance for their function and meaning, create their own masks and dance based on Yoruba stylistic considerations, and create their own dance-play based on a Yoruba myth which embodies the Yoruba concept of the world.

This set of materials will encourage students to:

perceive the aesthetic elements which shape the traditional arts of the Yoruba;

understand that the traditional art of the Yoruba, like much traditional African art, has a special meaning and function;

understand that the traditional cosmology or world view of the Yoruba is expressed in their arts (myths, visual art, music, and dance);

understand that in traditional Yoruba culture the arts are an integral part of the life of the people;

become aware that the expressive impulse is shared by people everywhere and that the cultural values and attitudes of a people help give that impulse its special form and meaning.

SYMBOLS OF ANCIENT MEXICO

This set of instructional materials, one of the Aesthetics and the Culture series, introduces students to the aesthetic values of ancient Mexico, symbolism, and how the values and symbols emerge in ancient and contemporary Mexican visual art.

Students explore the indigenous art of Mexico and its rich symbolic heritage. They learn that these ancient symbols expose the strands that weave together the Mexican nation. They come to perceive that particular view and its aesthetic values that continues to influence Mexican aesthetic expression today. Through a text, a slide/tape presentation, a sound/vocabulary tape and a recreation of several ancient rituals and games, students transform their classroom into a microcosm of the ancient Mexican world.

The set of materials is divided into three lessons. In Lesson One students learn that symbols are universal ways of expressing feelings about nature and that each culture views nature in a special way. They are then introduced to the specific symbolism of ancient Mexico and to the Mexican idea of nature. By examining ancient myths for meaning and function, they discover how the attitude towards nature shaped and molded the artistic expression of the Mexican people.

In Lesson Two students examine the ancient Mexican calendar which utilizes the culture's most important visual symbols. The students contrast and compare their concept of time and space with that of ancient Mexicans, then they create their own calendar and use their calendars to determine events in their own lives. In this way they come to understand more fully the beliefs and ideas that ruled the ancient world.

Lesson Three introduces students to the art of the Mexican murals and how they convey ancient Mexican cosmology through symbolism. Students study and analyze ancient murals as well as the works of contemporary muralists, Rivera, Orozco, and Siqueiros. Applying the aesthetic values associated with symbolism, students design and create their own mural.

This set of materials will encourage students to:

understand the origin and function of symbols in a culture;

perceive the specific symbolism of Mexico and how it appears in Mexican art forms;

understand that a culture's relationship to nature may influence its aesthetic values;

become aware that traditional Mexican art forms express a unique relationship with nature;

know that the need to express feelings about one's world is a desire of people in all cultures and that the various manifestations of this need are a result of the cultural differences.

AMERICAN POPULAR CULTURE

American Popular Culture, part of the Aesthetics and the Culture series, explores aesthetic values held by contemporary Americans as revealed by television, radio, newspapers, magazines, street art, ad art and fashion.

Students increase their perception of contemporary American aesthetic values by examining the sounds and images of media and by studying objects created by American artists and non-artists. They create their own media sounds and images and make objects to express what they value aesthetically.

Possible discussion topics include:

> the development of an art form from a human need, for example, the art of fashion design as it grew from the need to clothe the body, or the art of architecture as it grew from the need for shelter;
>
> the development of artistic expression as represented in paintings which grew from the human need of self-expression and personal aesthetic values;
>
> the relationship between intent and effect, and what it reveals about aesthetic values;
>
> choice-making among sounds, images, and objects as an expression of personal aesthetic values;
>
> the media as a link of the people in a heterogeneous culture;
>
> how artists create sounds and images that express the impact of everyday events and objects on the lives of the people.

Activities for this set of materials may include: creating personal wall posters from existing images; making designs and slogans for t-shirts to convey personal aesthetic values; conducting an in-class flea market of images and objects that examplify contemporary American aesthetic values; creating an advertisement that emphasizes the aesthetic qualities of an object; creating an art object for a utilitarian purpose; and going on observation walks to perceive individual aesthetic expression in yards, windows, houses and cars.

The materials in this instructional unit include a teacher's guide and a student text in magazine format. The student magazine is tentatively titled Culture and will contain illustrated articles corresponding to the lessons and activities outlined in the teacher's guide. Tape of radio programs and slides will complement the student text. The actual use of real media and field trips to homes, car lots, flea markets, stores, and junkyards will be an important part of the activities. The media and field trips will reveal what Americans find aesthetically valuable today.

This set of materials will encourage students to:

perceive more clearly American aesthetic values as revealed in popular art forms;

examine American culture as it is presented by the mass media;

understand that an art form may grow out of a human need;

become aware of the intrinsic beauty in the everyday world around them.

A SENSE-ATIONAL TOUR THROUGH RUSSIA

Soviet apologist, Ilya Ehrenburg states "that the whole world could be covered with asphalt, but that somehow, sooner or later, green grass would break through." That bit of green is referred to by Ehrenburg as the culture of a people. A Sense-ational Tour through Russia, part of the Aesthetics and the Culture series, focuses on the Russian culture.

A game format is the vehicle of exploration. Through the use of a game design each player can focus on different highlights of Russian culture, but eventually all players will experience many forms of the culture.

Specific Game Procedures

1. Preparation. Before embarking on a trip to Russia, each student draws 10 symbol objects which will represent various works and values found in the student's own culture. These symbol objects--films, tapes, foods, clothes, records, T.V. shows--receive specific titles and names which reflect each student's personal value.

Example:

Student's Symbol Selection	Specific Title Choice	Exchanged For
Film object	Jaws	(to be completed)
Food	Quarter Pounder with Cheese	(to be completed)
Record	One of These Nights by The Eagles	(to be completed)

Students record and title their choices as above. While playing this game, students are asked to exchange items they value for items the Russian people value.

2. Arrival. Four students may travel simultaneously on each game board. Students choose various travel symbols (backpacking, motor biking, bicycling, autos, cross country skiing, etc.) which represent them on the game board.

The game board design is as follows. 36 color-coded squares surround an illustration of the Soviet Union, with special visual treatment of Russia and specific visual detailing of Moscow, Kiev and Leningrad. The squares surrounding this illustration will be made up of six colors randomly sequenced.

The six colors symbolize the five senses plus incidents. By chance, students move around on the game board and land on various squares (sense or incident). The six possibilities correspond with six color-coded decks of cards which encourages sense encounters for each student experience. Sight, sound, smell, touch, taste and incident decks help the students encounter Russian culture from KGB and the Russian alphabet to a toy-making school outside of Moscow. Each sense card creates an experience within the culture and encourages sense awareness of the cultural forms. The incidents are resolved with the cooperation of the teacher, and the sense experience is resolved by each student with the help of a Russian Cultural Resource Center, which consists of books, magazines, cassettes, 35mm slides, recipes and other materials which give students closer insight into the Russian values, ideas and creativity.

Certain play cards will ask students to exchange items they value for things the Russians value. The duration of the travel is dependent upon the exchange rate each student chooses.

3. The object of the game. Each card of the six color-coded decks has a 35mm slide equivalent in the Resource Center. As students travel the country they accumulate the cards which they experience during their travels. These cards act as an outline for a personal presentation by each student which illustrates the pace and tone of what they had experienced.

As the culminating activity, students exchange cards for slides and prepare an audiovisual tactile all-sense presentation of their experiences. In their final presentation students will discuss their choices and the values that decided those choices--why did they like it? Did the people they exchanged with like it?

Example Cards

Description of Visual and Content

Went to Moscow's Polytechnic Museum for a public reading of poetry by Rasul Gamzatov. Gamzatov is a native of Daghestan, the capital of the Daghestan Autonomous Republic on the shore of the Caspian Sea. His writings are read and appreciated in homes throughout the country. His generous, heart-warming, fiery poems are reflections on life and love--the poet's answer to universal questions. It is very difficult to get tickets to his public readings because he is so popular. In fact, so many people want to see and hear him that they crowd the stairs and aisles and even sit on the stage.

NOTE: Poems included.

-- SIGHT --

Description of Visual and Content

Side Trip

Visited Uzbekistan, the biggest of the Soviet Central Asian republics, during the gay and exotic festival of Kovun Saili (Melon Festival). The noisy Oriental bazaar abounded in piles of watermelons and muskmelons, grapes, apples, pears, peachs--a veritable kingdom of fruit, a hymn of abundance. The sonorous sounds of the national instruments, the karnai, surnai, tambourines and nogar, proclaimed the beginning of the festival. This music immediately transported everyone hearing it into the realm of oriental fairy tales. The young Uzbek boys and girls, clad in bright national gowns, began to dance. The culmination of the festival was the shurinaki, or mass tasting of melons.

-- SOUND --

Description of Visual and Content

Went to the Museum of Ethnography of The Peoples of the USSR in Leningrad, and saw an unusual exhibition--the art of spice-cookie making. Russian spice cookies are made of hard pastry flavored with honey, molasses and spices. They are baked in a variety of shapes and iced. Spice cookies keep for a long time and are often bought as souvenirs. There are many spice-cookie motifs, such as: a fancy fish, lions, a girl in a Russian sarafan, birds or a deer.

NOTE: Recipe included.

-- TASTE --

This set of materials will encourage students to:

understand that the Russian culture has its own aesthetic values;

engage in art form/event/ritual activities which exemplify the aesthetic values of the Russian culture, and so internalize the aesthetic values of that culture;

understand that the aesthetic values of the Russian culture are closely related to the other values of the Russian people.

AMERICAN INDIANS: THE PEOPLE OF EARTH AND SKY

This set of instructional materials, one of the Aesthetics and the Culture series, introduces students to the concept of ritual as an art form and how the oral tradition, the music, and the crafts of American Indians relate to the concept of ritual.

For American Indians ritual is a way of maintaining harmony with nature. Literature accompanies religious ritual, crisis rites, and curing ceremonies, as well as work activities. Its moral teachings help define all manners of political and social relationships. Embodied in the stories and poetry, and in the narratives and songs of the American Indians, are a series of rules about human behavior. These rules define relationships between people, between people and nature, and between people and the supernatural.

The materials present an overview of various tribes' rituals through stories, examine the function of ritual and its origins, and explore the development of ritual. Students learn about the magical properties associated with American Indian art and the function of oral tradition, music, and crafts as they relate to the American Indians' cosmologies.

The student activities reflect the concern with ritual and illustrate the stories. Some of the activities are a cycle-of-life drama, sandpainting, a potlach festival, and the building of a loom for cloth weaving.

This set of materials will encourage students to:

> understand the influence of ritual in the art forms of the American Indians;
>
> explore the American Indians' concept of ritual as a way of maintaining harmony with nature;
>
> examine the Indians' rules governing human behavior as they are embodied in the Indians' art forms;
>
> understand that a culture's relationship to nature may influence its aesthetic values.

F. Aesthetics and the Environment Series

Summary Statement: Aesthetics and the Environment Series (Grades 6-7)

Objectives: To identify major concepts, approaches to study, objectives, and alternate solutions to the problems of analysis and selection of curriculum content for aesthetic education applicable to the overall concept Aesthetics and the Environment for grades 6-7. To implement the development, trial teaching, and revision of units of instruction in this area by preparation of seven multi-media instructional units.

Description: Environment is the interaction of people and places. Environments should allow people to become involved with and participate actively in the environments. Aesthetic environments should reinforce the activity and participation of people. The activities in these materials will encourage students to explore, analyze, and make decisions about environments based on these ideas and to provide opportunities for projects which would make some immediate change in their own environments. Instructional units in this group should build on the concepts in the six earlier series.

Instructional units in this Series include:

Environment: People + Space = Place
Experiencing Environments Through Our Senses
Moving Through the Environment
The Individual and His Own Personal Space
Communities--Then and Now
Environments of Tomorrow
New Environments Through Design

Outcomes: The student is aware that aesthetic considerations play a major role in enhancing the quality of his environment.

The student will be able to analyze, judge, and value his environment for its aesthetic properties.

The student is able to make decisions relating functional and aesthetic considerations in the environment which affect the general human condition.

The student demonstrates his interpretation of a quality environment by organizing arts elements and environmental components for change.

Status Report: As of November 30, 1975, the content for the series will be defined and the writing of the first three units will be completed.

THE SEARCH FOR THE MOST EFFECTIVE APPROACH FOR TEACHING ABOUT THE AESTHETIC QUALITIES OF ENVIRONMENTS

Due to the nature of the material, several sessions were spent in the classroom trying to determine the direction of the first instructional unit. Children were asked to talk about, illustrate, and do improvisations relating to experiencing many environments. Different stimuli were used to explore the students' reactions to particular places. Most of their interpretations were related to social aspects (who they were there with, what they did together) and psychological aspects (I like to be alone, we can ride horses there and that way we feel good; I can go there and get away from problems).

The question was "What would be the most effective approach to attending to the aesthetic qualities of environment?" One of the major focuses in exploring environments is the degree people participate and become involved in creative and imaginative ways. One of the goals of the series is to introduce students to ways of creating more expressive environments. Aesthetic environments should reinforce the participation and involvement of people.

The following example illustrates this idea. In many downtown centers skyscrapers are built with big open plazas. If nothing is done with these areas people pass through them. Some of the plazas allow for a great deal of participation. There are shops at street level for people to look in. There are benches and grassy areas for people to sit. Sometimes there are tables and outdoor restaurants where people may come together. Occassionally there is a small band of musicians. Along with this there are sometimes trees or other foliage and large pieces of sculpture. This kind of environment will reinforce aesthetic experiences and allow for people to come together and participate.

Various techniques are being investigated in terms of exploring environmental aesthetics with the idea of people-participation in mind. The methods used in analyzing works of art which are generally more static and complete do not always apply when analyzing a continually evolving environment which is bombarding all of our senses.

The arts happenings of the sixties and early seventies come closer to the idea of environment as a theatre for action and interaction through a single musical event, poem, or painting. In analyzing environments we will be looking at the process of how that environment evolved and continues to evolve. In comparison to looking at art works, it would be similar to analyzing the creative process the artist goes through rather than the end product. The difference between examining an artist's work and an environment is that there are a series of criteria for looking at works of art, whereas the criteria for examining environments aesthetically is not as set and has many more social, economic, and political influences.

The information on the following pages is a brief description of the seven units. The major concept that will run through all the units is: the aesthetics of an environment enhances one's quality of life.

ENVIRONMENT: PEOPLE + PLACE = PLACE

The two major concepts for this unit are: Environment is the interaction of people and place; People make places and places make people.

The unit will give the students a definition of environment. The general objective is to have the students become acquainted with the idea that environment is not an object, but an always changing phenomenon and that people are part of environments. The second objective is to have the children explore ways to change environments to make them better, more aesthetic places for people.

A scoring activity will be developed. It will use a neighborhood street in order to give the students a chance to analyze the environment. The students will examine texture, color, patterns, etc. through the use of an objective technique. This will help them develop a working language about environment.

EXPERIENCING ENVIRONMENTS THROUGH OUR SENSES

The major concept for this unit is: We experience environments through our senses.

The general objective is to have the students become aware that all our senses play an important role in how we interact with environments and how the environments make us feel.

The students will be introduced to the idea that our senses tell us about places and that some places and the activities that go on in them appeal to one or two senses more than the others.

The unit will take the children through a sensory exploration of many places. Each of the senses will be singled out in exploring these environments. The students will learn that some things appeal to our senses and others offend our senses. Different reactions to, and appreciation of, particular experiences in various environments will be analyzed from this viewpoint.

MOVING THROUGH THE ENVIRONMENT

The major concept for this unit is: Movement is both a functional and an aesthetic component of the environment. Environment is a theatre for action and interaction.

The general objective is to have the students become aware of how movement helps to shape their world and how they can create more pleasing environments by being aware of movement in the environment.

The unit will emphasize the following concepts:

> Places are spaces where events, ceremonies and happenings occur.
> Spaces are shaped by nature and by people.
> Each time we enter into a space we add to it. We leave our mark.
> We learn about our world by moving through space and in space.

THE INDIVIDUAL AND HIS OWN PERSONAL SPACE

The major concept for this unit is: People desire to define and personalize the spaces they inhabit.

In the past people were more involved with their own spaces. As society has changed and cities have developed, people have become less directly involved in building their own places to live, but the desire for a personal space is still there.

"Knowledge about man's immediate environment, the hollows within his shelters that he calls offices, classrooms, corridors, and hospital wards, is as important as knowledge about outer space and undersea life. For too long we have accepted physical forms and administrative arrangements based upon outdated views of human activity. We are told that classrooms should have straight rows of chairs so the children will face the teacher, prisoners should be kept in separate jail cells, college students should have roommates, and park benches should be heavy and indestructible so that vandals will not cart them away. With or without a conscious philosophy or explicit recognition of the fact, designers are shaping people as well as buildings."*

The general objective is to have the students become aware that one's environment is an extension of one's self. The unit will give examples of how people personalize their environments. Through the unit the students will examine their own environments and will make some decisions and plans for change.

Environmental concepts to be explored in this unit are:

Places for Living,
Places for Shaping,
Places for Studying,
Places for Playing,
Places for My Belongings.

The word "appropriate" would be introduced in relationship to aesthetic qualities. This term could then apply to many situations rather than to making value judgments as the use of the terms good or bad would connote.

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*Personal Space, The Behavioral Basis of Design, Robert Sommer, 1969.

COMMUNITIES--THEN AND NOW

> There are different sizes of man. There is the small man which is the single man, and a large man which is the community--of two or of everyone. Something changes when the size changes...Someone needs to direct the traffic and invent the larger size ceremonies... For a single man to laugh, the equipment is all built in...For a larger man to celebrate, more muscles are needed...For a still larger man to celebrate, it becomes more complex still. He needs more space--a whole city, and more equipment...So we need city planners and they need to be in touch with the complex needs... But if he only knows physical facts and knows no poetry or irony... he will be out of touch...And the people...will become weak and unable to act unable to express and explain themselves to each other. They will disintegrate. They will not be able to remember together who they are...And so this larger man will begin to do the opposite of remembering--he will dismember...Witness Watts or Chicago or Harlem, where humans have been denied the right to express need or anger or love. They respond in chaotic, destructive ways. We can only be grateful that they respond at all--that we have not fully killed them...Always there remains this need to explain to each other that we are good. We all have a constant need to be reaffirmed. The single man needs this. The whole human race needs a "Yea"--needs the large ceremonial pat on the back that says "Come on, come on! We can make it."*

The major concept for this unit is: All people are builders, creators, molders, and shapers of the environment; we are the environment. The emphasis of this unit will be on the community and on the city and people's effect on them and how they effect people. Environments in this unit will be examined by using the street as a path through the environment. The street will be viewed as a connector, a market place, a divider. There will be a look back into history. Communities will be explored as they were in the past and as they are now to show specific examples of people's effect on environments. One of the possibilities is a critical look at the Santa Fe Trail, then and now, and a total look at St. Louis, past, present, and future.

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*Corita Kent

ENVIRONMENTS OF TOMORROW

The major concept for this unit is: As people have dreamed of the future they have been guided by the experiences of the past.

Some examples of this were the dreams of Leonardo da Vinci, H.G. Wells, and the author of Flash Gordon. Students look at some of this literature in terms of its historical time and of what has come to be. They will then look at some of the people of today such as, Soleri and Fuller, in terms of their thoughts for the future on the problems of today.

The major object of the materials is to introduce the students to the idea that artists' expressions of imaginary places have gone on throughout history. Many artists have been people ahead of their times. An exploration of various contemporary artists' expressions of ideas of the future will become a basis for the students' own explorations of ideas for the future.

NEW ENVIRONMENTS THROUGH DESIGN

The major concept for this unit is: "When group interaction can be based on a framework for group creativity, it will enhance and enlarge individual creativity."*

The general objective is to have the students solve a problem through a simulation game. This game represents what could very well be happening in their school or community. The content of this unit would consist of a small group of environmental problems where the major issue is the aesthetics of that particular environment.

A simulation game will be designed in order to provide the students with a structure for some creative problem solving.

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*Laurence Holpin and Jim Burns, Taking Part.

BACKGROUND DEVELOPMENT ON AESTHETICS AND THE ENVIRONMENT SERIES

In March 1974, the Aesthetic Education Program began developing the conceptual scheme for the *Aesthetics and the Environment* series, grades 6 and 7. Nathaniel L. Champlin of our Advisory Committee worked with us by meeting with the staff and preparing a position paper. Working from that position paper we developed a draft outline for the Environment series. We singled out various aspects of the environment and the relationship of these aspects to aesthetics. The original titles were:

Aesthetics and the Environment: An Aesthetic Field Trip
Aesthetics and the Environment: Imaginary Environments
Aesthetics and the Environment: Aesthetics of Personal and Public Spaces
Aesthetics and the Environment: Around and Through the Environment
Aesthetics and the Environment: Environments of the Future
Aesthetics and the Environment: Aesthetics of Technology
Aesthetics and the Environment: Aesthetics of the Arts in the Environment

In setting up this outline, we felt that we covered the concepts that pertain to aesthetics and the environment. In May of 1974 an ad hoc committee from the National Advisory Committee reviewed the draft. As we looked at this outline, there was still some question of whether we had covered the most important concepts and whether we had any logical sequence. Even though each instructional unit should stand alone, the series must hold together. The problem which the committee found with our work was that we had started from the specific and had moved to the general.

A group of consultants who are specialists in their fields, (an urban planner, an architect, a specialist in designing learning environments--all educators) came in August 1974, for three days to examine our ideas and help us develop a better outline or plan for the whole series. Specialists who took part in the planning session included Dr. Ann Taylor, University of New Mexico, a specialist in designing learning environments; Theo Van Groll, Department of Architecture, University of Virginia; and Richard Whitaker, Jr., head of the School of Architecture, University of Illinois.

The series still has the objectives originally intended by the first set of titles. These are: to encourage in students an awareness of the aesthetic elements of the environment and to have them work with these elements. The units will ask students to use their senses to explore their world, examine what was appealing or offensive to their senses, examine how these reactions affected their experiences, and to make decisions about aesthetic changes in their environment and act on these changes.

We consulted with Louis Smith, educational psychologist, to re-examine the outcomes for the series; then we refined them and also examined them for sequence, going from more simple to more complex expectations. The outcomes are as follows:

The student is aware that aesthetic considerations play a major role in enhancing the quality of his environment.

The student will be able to analyze, judge, and value his environment for its aesthetic properties.

The student is able to make decisions relating functional and aesthetic considerations in the environment which affect the general human condition.

The student demonstrates his interpretation of a quality environment by organizing art elements and environmental components for change.

This series has been developing somewhat differently than previous series in which each set of materials was developed one at a time, beginning to end. The series is evolving across the instructional units which allows for constant examination and analysis towards a tighter conceptual framework.

Each instructional unit will work wtih a definition of environment and have students participate in activities, not just as passive observers, but as active decision-makers considering and shaping the aesthetic elements of their surroundings. The current titles, while retaining the original objectives, have a much more logical sequence, starting from the general and moving to the specific, and are much more child-centered than were the original titles.

The titles and direction of the materials have been reorganized in the following manner:

Focus I

1	Environment: People + Space = Place	Introduction
2	Experiencing Environments Through Our Senses	Exploring the role our senses play in experiencing environments
3	Moving Through the Environment	Exploring environments as theatres for action and interaction

The first grouping is a broader, more general view of how we perceive and experience environments and begin to make decisions concerning the aesthetic qualities which would contribute to richer experiences and more pleasing environments.

Focus II

4	The Individual and His Own Personal Environment	Exploring personal environments from the view that one's environment is an extension of one's self
5	Communities--Then and Now	Exploring the evolving community or city and the social, economical and political effects on the aesthetic qualities of the environment
6	Environments of Tomorrow	Exploring imaginative designs for the future based on artists' expressions of environments or imaginary worlds of the past and present
7	New Environments Through Design	Exploring and solving problems towards designs for living through group process

There are two options which are possible solutions for the content of two units. This involves units five and seven.

Option one is to develop the seven units as they are described above. Option two is to divide unit five into two units which would then become units five and six. Unit six would become unit seven. Unit seven would be deleted.

This will be determined as the content in the units under Focus II becomes more concrete.

The second grouping becomes much more specific in the nature of the environments which we are exploring and the specific problems to be solved. Each unit will entail behaviors such as perceiving, experiencing, analyzing and acting, but they will be directed towards very specific kinds of environments.

From this scheme the perameters for the series were developed and each package was sketched out. The following is a working draft on the proposed series.

Aesthetics and the Environment

1. The activities in each set of materials will relate to the student's immediate environment, where he will have to make decisions and judgments that will affect his own and other students' environments. After the series of activities there will be one jamor activity based on aesthetic criteria that will require some change in the student's environment. The project will involve group and individual decisions and will result in some design for change to improve the quality of the student's environment.

2. Each set of materials will involve perceiving and analyzing, judging and valuing, and producing and performing in environments.

3. Each set of materials will introduce the concept through a book. The book will include the content base for all the activities and will be used throughout the materials. The group of books across the series should develop into a total unit in itself although each will stand alone.

4. Each set of materials will include concepts previously taught in other instructional units. Therefore, each set of materials will contain a resource guide which will include a list of materials that will help reinforce the concepts from other instructional units previously developed in the series.

G. Instructional Materials for the Teacher

Summary Statement: Materials for the Teacher

Objectives: To identify major concepts, approaches to study, objectives, and alternate solutions to the problems of analysis and selection of content for aesthetic education applicable to teacher preparation for aesthetic education. To implement the development, trial teaching, and revision of units of instruction in aesthetic education for teachers by preparation of six sets of materials. To develop training strategies and materials for teachers using the program.

Description: This series of multi-media instructional units is designed to assist teachers in pre-service and in-service education to develop an understanding of the content of aesthetic education. The teacher is given an overview of the idea of aesthetic education; some insight into a method for aesthetic perception; an introduction to some elements in theatre, dance, visual arts, literature, and music; experiences with the creative processes of transforming arts elements into whole works; an understanding of aesthetic influences and decision making in daily activity and the crucial part they play in human development; and specific information on how to develop an aesthetic education curriculum.

Instructional units in this Series include:

An Introduction to Aesthetic Education
Aesthetic Perception: What Do You Say After You Say "I Like It?"
Arts/Parts: Perceiving and Analyzing the Arts
Designing an Aesthetic Education Curriculum
The Creative Process
Aesthetics in the Everyday World

Outcomes: The teacher develops insight into the characteristics of aesthetic content in education and the aesthetic characteristics of the natural and man-made environment.

The teacher gains specific competency in perceiving basic characteristics of aesthetic phenomena, and in recognizing and relating basic elements of arts disciplines to the structure of a whole work.

The teacher gains specific competency in organizing aesthetic elements into a whole work and knows how professional artists representing different forms approach this process.

The teacher gains specific competency in selecting and organizing content for teaching and learning in aesthetic education.

Status Report: As of November 30, 1975, four instructional units will be completed and two others will be in development.

NIE PRODUCT: HOW DOES A RAINBOW FEEL?: AN INTRODUCTION TO AESTHETIC EDUCATION

DEVELOPER/AUTHOR: CEMREL, Inc.
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Stanley S. Madeja, Program Director
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Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Margaret Harrison, Product Developer

NARRATIVE DESCRIPTION

The Teacher Education series of the Aesthetic Education Program includes this instructional package which deals with an overview of aesthetic education in the elementary school. The pre-service and in-service teacher, for whom the materials are designed, will view a film entitled How Does A Rainbow Feel?, containing material and information relating to concepts in aesthetic education taken from the Aesthetic Education Program's children's packages. The film will illustrate the variety of aesthetic qualities in our environment: sounds, shapes, patterns, colors, textures. It presents works of art as illustrators of such qualities and then relates these perceptions to the elementary classroom. Children will be seen actively exploring and discovering such areas as body movement, shapes, point of view, characterization, and dramatic plot, using materials from AEP packages. The participants will view children joyfully perceiving and reacting to the aesthetic qualities in the world around them as well as analyzing their works, making choices, and participating in creative decision making processes.

A paper by Dr. Harry Broudy which will discuss concepts in aesthetic education and teacher education will also be presented in these materials. It will provide the participant with additional information on aesthetic education and a rationale for materials and concepts such as those developed by the Aesthetic Education Program. Discussion questions will be provided on both the film and Broudy's paper. Activities and resources relating to concepts on the film and the paper will be provided.

These materials will encourage participants to: 1) see the need for aesthetic education in the schools; 2) understand that aesthetic education is a balance between emotional perceptions and reactions and intellectual analysis and articulation; 3) become familiar with one method of approaching an aesthetic education curriculum; 4) look at a school system with which they are familiar in terms of an aesthetic education curriculum; 5) discuss the role the arts have played in their lives, both formally (going to a concert) and informally (buying a plant for decoration); and 6) have an understanding of the value of making aesthetic considerations part of every person's decision making process.

SUBJECT AREA(S)

Teacher Education: Aesthetics, Aesthetic Education, the Arts, Curriculum Development

Introduction to concepts in aesthetic education: an approach to curriculum development in aesthetic education; the value of the arts in elementary education.

INTENDED USERS AND BENEFICIARIES

These materials will be designed for pre-service and in-service teachers at the elementary level, although they would also be beneficial for secondary school teachers. They may be administered in a college course curriculum or in a teacher workshop situation. Although the arts are used as examples for teaching aesthetic education in these materials and the materials can be taught by arts specialists and aesthetic education specialists, the information and activities can also be easily used by a non-arts specialist.

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package will be for participants 1) to understand a rationale for aesthetic education in the elementary school; 2) to note concepts and materials applicable for curriculum development in aesthetic education; 3) to understand the role of the arts in general education; and 4) to relate the aesthetic qualities of our environment to the elementary classroom and the arts.

PATTERNS OF USE

How Does A Rainbow Feel?: An Introduction to Aesthetic Education will be a self-contained unit of instruction with activities that are sequential and cumulative. It may be used to provide instruction in the areas of aesthetics, aesthetic education, elementary education, curriculum development and arts in general education. It may be administered by a teacher trainer or worked on independently by a teacher group with the aid of a provided syllabus. These materials will be applicable to a variety of educational settings, including traditional university courses and short-term workshops.

ASSESSMENT PROVISIONS

Learning will be assessed by the teacher trainer and the participants. Specific procedures will be delineated during development.

TIME REQUIREMENTS

It is estimated that these materials will take approximately 10 hours to complete, depending on the class size, the educational setting, the time the teacher group is together, whether it is taught alone or is part of a larger curriculum plan, and how much utilization of outside activities occur.

IMPLEMENTATION PROCEDURES

How Does A Rainbow Feel?: An Introduction to Aesthetic Education will not require a specialist teacher. Participants will probably work individually and in small groups to enhance interaction. A working space will probably be necessary. Specific procedures appropriate to the learning experiences will be delineated during development cycle.

MATERIALS, EQUIPMENT, AND PERSONNEL REQUIREMENTS

Unknown at this time.

Personnel Required for Product Adoption and Implementation

A teacher trainer without special training in aesthetic education will be able to implement this unit of instruction. Curriculum consultation is available from CEMREL. Costs for such services can be obtained from this organization.

ASSESSMENT AND CLAIMS

The instructional unit, How Does A Rainbow Feel?: An Introduction to Aesthetic Education, is presently in development. When completed it will be tested as defined in the Basic Program Plan (CEMREL, 1972) and A General Plan for Evaluating The Aesthetic Education Program's Teacher Education Packages (Manis, 1974). At that time appropriate assurances and claims will be made.

AVAILABILITY

This product is in prototype stage of development and is scheduled for field testing during the Summer 1975. The materials will be copyrighted.

INFORMATION CURRENT AS OF MARCH 1975

NIE PRODUCT: WHAT DO YOU SAY AFTER YOU SAY "I LIKE IT"?:
A METHOD OF AESTHETIC PERCEPTION
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
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Stanley S. Madeja, Program Director
Nadine J. Meyers, Associate Director
Bernard S. Rosenblatt, Associate Director
Sharon Bocklage, Editorial Coordinator
Margaret Harrison, Product Developer

NARRATIVE DESCRIPTION

The Teacher Education series of the Aesthetic Education Program includes this instructional package, which deals with an introduction to aesthetic education concepts and a method of aesthetic perception. The pre-service and in-service teachers, for whom the materials are designed, use a variety of resources: a slide tape ("To Make New Again") with related discussion questions; a book entitled How Many Ways Can You Look At A Turtle?, which includes an explanation of Harry Broudy's method of aesthetic perception and activities centered around it; pertinent quotations on aesthetics, aesthetic education, the use of the arts as a vehicle for aesthetic education; an activity section based on the concept of an "education of the senses"; and relevant reference readings from experts in the field of aesthetic education. An activity involving discussion and arrangement of photographs of a bus station for its sensory, formal and expressive qualities (Broudy) illustrates to the participant that aesthetic qualities can be found anywhere. Final activities in the materials give the participant the opportunity to choose from various arts activities designed to illustrate knowledge gained in previous activities. Throughout the materials, suggestions are made as to how this knowledge can directly be applied to the elementary classroom.

These materials encourage the participant to: 1) begin to define aesthetic education and the need for it in the schools; 2) understand the arts as a vehicle for exploring aesthetic education; 3) become familiar with commentary from individuals in a variety of fields who have been concerned with concepts in aesthetic education; 4) gain a practical approach to understanding aesthetic perception by applying Harry Broudy's method of looking at the sensory, formal, and expressive qualities of an object or experience; 5) participate in activities that emphasize Broudy's concept of the sensory--activities which increase the participant's personal sensory awareness and which can be easily done by a teacher in an elementary classroom; 6) understand that although the arts are clear examples of the aesthetic qualities in our world, such qualities can be found and explored anywhere; and 7) actively participate in arts activities which will begin to familiarize them with possibilities for using the arts in the classroom.

Sample Lesson

"A Method of Aesthetic Perception" from How Many Ways Can You Look At A Turtle?

This lesson is designed to provide the pre-service or in-service teacher with a practical approach to aesthetic perception. Harry Broudy's method of looking at an object from its sensory, formal, and expressive qualities is presented in a simple and concise way, with illustrations indicating that an analysis method is easily applicable to both arts and non-arts objects and events. (The excerpt from Enlightened Cherishing where Broudy discusses this method in detail is also presented in the reference readings as reinforcement.) The participant is first presented with photographs of a turtle, emphasizing that any object can be looked at in a variety of ways (biologically, scientifically, how parts make up a whole, humorously, abstractly, metaphorically, etc.) The connection is then made that any object can also be looked at for its aesthetic qualities and this is done in the text for the participant with a photograph of a turtle and a delineation of its sensory, formal and expressive qualities. The participants are then encouraged to bring in a natural object and go through the process again with the object to reinforce what they learned from the photographs of the turtle.

Throughout this set of materials, the participant is asked to keep a journal wherein observations, perceptions, notes and comments can be recorded. After the turtle photograph, it is time for the participants to begin defining these aesthetic qualities and recording their perceptions in their journals. The next photograph is of a natural object: a cactus. The formal and expressive qualities are printed for the participant, who is asked to fill in the sensory qualities. In the next photograph, a people-created object of a series of telephone booths is illustrated. The sensory and expressive qualities are provided. The participant is to fill in the formal qualities. Finally, a photograph of birds perched on branches is provided. The participant fills in the sensory and formal, while the expressive qualities of the photograph are provided.

When the participant has a working knowledge of these terms, the focus is turned to the arts. A Trova sculpture is pictured and the sensory, formal, and expressive qualities of this art object are provided. Following this is a photographic collage indicating the scope and variety of arts forms. Finally, activities and discussion questions are provided which tell the participants to attend an arts event or bring in an actual arts object and use Broudy's method of analysis in perceiving the arts object or event aesthetically and to discuss how such analysis heightens their appreciation and critical judgments.

Asking the participants to actually seek out such arts experiences is an important goal of these aesthetic education materials. Although every activity is self-sufficient within a classroom or workshop situation, it is also crucial for participants to have additional outside experiences to see how concepts relate to the everyday world. Such activities and discussion questions are provided throughout and are strongly encouraged. Therefore, each lesson may vary in length depending upon the amount of time alloted for such activities by the teacher education group.

SUBJECT AREA(S)

Teacher Education: Aesthetics, Aesthetic Education, the Arts

Introduction to the idea of aesthetic education; how using a method of aesthetic perception can enable the individual to find aesthetic qualities both in the arts and in the "everyday" world; the relationship of aesthetic education and the arts; an intellectual, historical perspective on viewpoints on aesthetic education; the concept of "educating the senses" as a basis for beginning an aesthetic education curriculum.

INTENDED USERS AND BENEFICIARIES

These materials are designed for pre-service and in-service teachers at the elementary level, although they would also be beneficial for secondary school teachers. They may be administered in a college course curriculum or in a teacher workshop situation. Although the arts are used as examples for teaching aesthetic education in these materials and the materials can be taught by arts specialists and aesthetic education specialists, the information and activities can also be easily used by a non-arts specialist and give the participant varied experiences in several arts forms (literature, drama, dance, visual arts, and music).

GOAL(S) OR PURPOSE(S)

The purpose of this instructional unit is for participants: 1) to identify and explain in a general way the goals and rationale of aesthetic education; 2) to note that the arts are a vehicle for the expression of the aesthetic values of a culture; 3) to consciously attend to and experience sensory data for its intrinsic value; and

4) to perceive, react to, and analyze those factors in an experience or object which contribute to or detract from its aesthetic character by using a method of aesthetic perception.

PATTERNS OF USE

What Do You Say After You Say "I Like It"?: A Method of Aesthetic Perception is a self-contained unit of instruction with activities that are sequential and cumulative. It may be used to provide instruction in the areas of aesthetics, aesthetic education, elementary education, and arts in general education. It may be administered by a teacher trainer or worked on independently by a teacher group with the aid of the provided syllabus. These materials are applicable in a variety of educational settings, including traditional university courses and short-term workshops.

ASSESSMENT PROVISIONS

Learning is assessed by the participants and/or the teacher trainer. Students are given a pre-activity asking them to define aesthetic education. This is also asked at the end of the materials and participants can evaluate the growth of their perceptions, vocabulary, and understanding. Throughout the materials, participants are encouraged to use the provided method of aesthetic perception as a means of evaluation and analysis and to compare, contrast, discuss, and share their questions, comments and insights with each other. Guidelines for discussion questions are provided as a means of suggesting standards for discussion. Participants are also asked to evaluate each others' work in the activity sections.

TIME REQUIREMENTS

What Do You Say After You Say "I Like It"?: A Method of Aesthetic Perception takes approximately 10 hours with individual sessions being not less than 45 minutes to complete depending upon the class size, the educational setting, the time the teacher group is together, whether it is taught alone or is part of a larger curriculum plan, and how much utilization of outside activities occur.

IMPLEMENTATION PROCEDURES

What Do You Say After You Say "I Like It"?: A Method of Aesthetic Perception does not require a specialist teacher. This set of instructional materials has been tested with both pre-service and in-service teachers. It is recommended that it be taught in small groups to enhance interaction and allow a teacher trainer to respond specifically to each participant. Students will require space for several of the activities and will need room to spread out some of the materials. The syllabus outlines all such procedures and has been rated as useful in testing situations.

If there is a teacher trainer with a background in aesthetic education or the arts, he or she is encouraged to relate these materials to his or her own curriculum, bring in additional resources, and relate the learning experience to the specific needs and background of the teacher group, if possible.

If the teacher trainer does not have such a background or if the group is working independently, the syllabus provides all necessary information for implementation.

A teacher trainer is strongly encouraged to make the outside activities an integral part of this learning experience. Consumables are minimal and the materials in the package are easily manipulated and stored.

MATERIALS, EQUIPMENT AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Participant Materials:				
Discussion cards for slide tape		*		
How Many Ways Can You Look At A Turtle ? book				
Bus station photo cards				
Bus station activity cards				
Worksheets for Bus Station Game				
Final activity cards				
Reference readings				
Teacher Trainer Materials:				
Syllabus				
Slide tape				
Slide tape synchronizer manual		*		
Aesthetics and the Problems of Education by Ralph Smith, ed.				
Enlightened Cherishing by Harry Broudy				

*Materials are still in the field test stage, therefore, costs have not yet been determined.

Personnel Required for Product Adoption and Implementation

A teacher trainer without special training in aesthetic education can implement this unit of instruction. Curriculum consultation is available from CEMREL. Costs for such services can be obtained from this organization.

ASSURANCES AND CLAIMS

Assurances

Information gathered by careful observation and questionnaires at each of the four field test sites indicated no harm has resulted from the use of this product.

Packages are carefully scrutinized to eliminate any form of social bias, ethnic or sexual stereotyping, or inappropriateness of content. Any question of such bias or inappropriateness of content in the package is directed to qualified persons in order to consider how the materials should be revised to elminate such shortcomings that are identified.

Information gathered from four field tests of the materials indicates that the materials can stand alone in the hands of a competent teacher trainer in pre-service and in-service training settings.

Claims

A major claim to be made about the Aesthetic Education Program's instructional materials in teacher education is that they represent the only comprehensive teacher education curriculum resource based on aesthetic education that has been developed in the United States using the carefully defined development and evaluation procedures basic to the concept of an educational laboratory.

At all stages of development, a National Advisory Committee of educational psychologists, educators, and arts educators review the substance and form of the instructional materials. A formative evaluation is carried on during the creation of each package of materials developed by the program. In the early stages of development, trained observers carry out an observational monitoring of a trial implementation of the package, or various package components, in prototype form. The information derived from this monitoring serves as a basis for revising the materials for further trials. It also serves as an early warning system for the detection of any intrinsic shortcomings in the package. After revision, a second evaluation is carried out in four or more teacher training settings. In this stage, the materials must pass three major tests: First, they must be in keeping with the overall goals of the program. Second, there must be evidence that the materials can stand alone in the hands of a competent teacher trainer. Third, the materials must meet certain package-specific objectives, observable in the behavior of the persons who have studied the materials. After the above testing of the materials, the materials are revised on the basis of information gained during testing.

The evaluation of this product was carried out in four diverse pre-service and in-service teacher education settings. Two were school district in-service workshops and two were university based courses in which the participants were predominantly pre-service, elementary teachers. Observation and questionnaire data indicate that even teacher trainers who are not specialists in one or more of the arts are able to successfully implement the package. Qualitative assessment journals completed by package users indicate that most users are able to complete the instructional activities in the manner intended by the developer.

User satisfaction and judgments about the worthwhileness of the package were universally positive during the evaluation.

AVAILABILITY

This product has completed the test cycle and is undergoing minor revisions. While a publication date has not been determined, it is anticipated that this product will be available in the Fall 1975. This product is covered by copyright.

INFORMATION CURRENT AS OF MARCH 1975

Evidence to Support Assurances and Claims for What Do You Say After You Say "I Like It"?: A Method of Aesthetic Perception

Careful Development:

Assurances and claims for careful development are supported by the Basic Program Plan, Aesthetic Education Program (CEMREL, 1972). A General Plan for Evaluating the Aesthetic Education Program's Teacher Education Packages (Manis, 1974) explains in greater detail the application of these procedures for development and evaluation in the area of teacher education.

Successful Implementation:

A trained observer from CEMREL was present at each of the four sites when the teacher education package was tested and was able to carefully observe package implementation. In addition, a questionnaire was administered to each teacher trainer gathering information about the manageability and degree of implementation (Checklist for Facilitators). The observation and questionnaire data are presented and discussed in detail in the evaluation report, What Do You Say After You Say "I Like It"? Formative Evaluation of Teacher Education Package #1 (CEMREL, 1975). In teacher trainers' responses to the Checklist for Facilitators, only one activity of eight total in the package was judged by one of four trainers to be "generally unmanageable in my situation." All other activities were judged by each of the four trainers to be "generally manageable" or "completely manageable." The observer's judgments supported those of the trainers (Formative Evaluation of Teacher Education Package #1, p. 8).

Effectiveness:

Claims and assurances of this product's effectiveness are documented in the Formative Evaluation of Teacher Education Package #1. The primary claim of effectiveness rests on users' ability to apply Harry Broudy's method of analysis, as embodied within the instructional materials, for identifying sensory, formal, and expressive qualities within natural and man-made objects. Qualitative assessment of users' application of the method of analysis in daily journals and during instructional activities indicates that by the end of training, users are readily able to identify and describe sensory and expressive qualities but continue to experience difficulty with the formal qualities (p. 14). Revisions will be made for improving user application of the concept of formal qualities.

Satisfaction:

Judgments by users about their satisfaction with the package and about its worthwhileness as an educational activity were overwhelmingly positive, based on user responses to formal questionnaires (Participant Questionnaire and Facilitator Checklist). All questionnaire data are included in the Formative Evaluation of Teacher Education Package #1.

Generalizability:

The claim for generalizability rests on the diversity of settings used for the evaluation herein reported. A summary description of the four test situations are presented in Figure 1. A more complete description is included in the Formative Evaluation of Teacher Education Package #1.

Figure 1 - Comparison of Test Sites

	Oakland June '74	Memphis July '74	Illinois State August '74	Oklahoma City Fall '74
(a) Type of training credit offered	Summer teacher workshop for inservice credit on salary scale. Attendance by teachers' choice.	University credit (3 hrs. in Curriculum and Instruction) for AELC-based summer workshop on aesthetic education. Participants paid own tuition. Were selected from approx. 70 who requested the course.	As part of a university course on elementary curriculum.	University course organized around the teacher package. Regular university credit (2 hrs.) Attendance by students' choice.
(b) Facilitator description	Coordinator of AELC. Previous teacher training and administrative experience. Specialist in Visual Arts.	2 facilitators (the AELC Coordinator, whose background is in theatre and a professor in Curriculum and Instruction from the accrediting university.	Coordinator of AELC and professor in Curriculum and Instruction.	Coordinator of AELC. Teaching duties at university level in Drama and Education. Specialty in Children's Theatre.
(c) Participant description	Fifteen teachers, parent volunteers, and administrators from Oakland City Schools: 10 teachers, elementary and secondary; 1 elementary administrator; 4 parent volunteers for K-3 school.	27 inservice teachers, elementary including 1 P.E. and 2 Reading specialists. Most were employed in the Memphis City Schools.	Ten, mostly elementary ed. at preservice level, in teacher certification programs.	Seven university students, including 2 master's students. A mixture of majors (Elem. Ed., Business Ed., Mass Communications, for example.)
(d) Duration of training	Three consecutive days (2 hrs. per day) 6 hrs. instruction time.	Nine consecutive days, 8:30 a.m.-3:30 p.m. (approx. 1/3 - 1/2 of the time was spent on the teacher pkg.) 18-20 hrs. spent on the teacher pkg	Approx. 6 hrs. of instruction spread over 5 consecutive days.	Approx. 18 hrs. of instruction spread over nine weeks of classes. (Additional "out of class" time was spent viewing arts events)
(e) Use of other materials and activities	Slight use of AEP children's pkgs. Less than complete coverage of teacher pkg.	About half of the time was spent on AEP children's pkgs and interpersonal relations activities in addition to the teacher pkg.	Package use was small, but separate part of a larger course. Omitted Activity 1 and 3 of Part II and 3 of Part III.	Followed teacher package closely and exclusively.

NIE PRODUCT: ARTS/PARTS: PERCEIVING AND ANALYZING THE ARTS
(Part of the Aesthetic Education Program)

DEVELOPER/AUTHOR: CEMREL, Inc.
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NARRATIVE DESCRIPTION

The Teacher Education series of the Aesthetic Education Program includes this instructional package, which deals with the arts as examples for aesthetic education. In order to use the arts as an effective teaching tool, the non-arts specialist must become familiar with the elements in arts forms and how they relate to the aesthetic qualities of our world in order for the arts to be understood and used creatively. Through the use of a large multi-media book entitled Arts/Parts the teacher-participant explores some of the elements in each of five arts: drama, music, visual arts, dance, and literature. The elements are introduced to the participant in each of five major activities. Then the participant actively explores the elements through additional activities using the arts vocabulary already learned. The book is a self-contained unit consisting of such things as a fold-out performing space board with moveable figures, a music board, exerpts from drama and literature, recorded selections, a visual arts puzzle, various types of activity cards, photographs and critical reviews. A manual within the book provides the participant with objectives, directions and follow-up activities. Reference readings by arts experts discussing the elements of each art form are provided as is an extensive bibliography and concept statements from related AEP children's materials to aid the participant in curriculum development. Final activities encourage further arts exploration and ways of relating the knowledge learned to the elementary classroom.

This package encourages participants to: 1) explore such musical elements of rhythm, melody, harmony, meter, tone color through a sound board with overlays and accompanying tape recording and to relate the knowledge learned to other musical compositions; 2) explore such elements as line, color, shape, texture, value through overlays of Picasso's Guernica and relate this vocabulary to other works of art as well as creating their own composition with an elements puzzle; 3) explore such elements as motion, space, and setting in drama and dance through a performing space board with moveable figures and setting cubes; 4) explore such elements of plot, conflict, intention, subtext, character, and setting in drama through analyzing and acting out a written script; 5) explore these elements again by analyzing a scene from Hamlet with provided audio tape to see how the written word and the spoken word combine in drama; and 6) look at such elements as imagery, metaphor, figurative language, theme, setting, character and conflict in literature by analyzing a short story and a poem and then creating their own works by using Word Picture cards. Final activities encourage the participant to go out and seek additional arts resources, to become an active participant in arts events, and to use the knowledge gained in Arts/Parts in the elementary classroom.

Sample Lesson

Visual Arts Elements

This lesson familiarizes the participant with some visual arts elements of line, shape, color, texture, and value. The first activity involves Picasso's Guernica which has been taken apart on a series of acetate overlays, each overlay showing one of the above elements. The participant can see how Picasso used each of these elements by first examining the overlays individually. When the overlays are all placed on top of each other, the participant can see how the work comes together to form an aesthetic whole. The same procedure is then done by the participant using Rousseau's The Dream, using blank overlays and a provided grease pencil for drawing and shading. In the third activity, an elements puzzle made up of abstract black and white pieces is provided. The participants select a theme and create their own visual arts work. They are asked to articulate why they used various elements in a specific way to best illustrate the chosen theme.

Finally, a series of photographs is presented which represent a variety of visual arts forms in different periods and styles (painting, sculpture, architecture, etc.) The participant is asked to discuss these pictures using the vocabulary learned and to make comparisons and contrasts. The participant is also given a reference reading by Reid Hastie from Encounter with Art which further details the elements in the visual arts. Additional information on the visual arts used as examples in the photographs is provided in a Resource Section in the manual as is a detailed analysis of Guernica.

SUBJECT AREA(S)

Teacher Education: Aesthetic Education, Elementary Education, Music, Visual Arts, Drama, Dance, Literature

Introduction to elements in various arts forms; how these elements combine in a unique way to create a specific aesthetic intent; the relationship of the arts to aesthetic education; the development of a vocabulary which can be applied both to the arts and to the aesthetic qualities of the everyday world; the development of a critical, responsive audience to arts objects and events; curriculum development in aesthetic education.

PATTERNS OF USE

Arts/Parts: Perceiving and Analyzing the Arts is a self-contained unit of instruction with activities that are sequential and cumulative. It may be used to provide instruction in the areas of aesthetics, aesthetic education, elementary education, arts in general education and an integrated arts course. It may be administered by a teacher trainer or worked on independently by a teacher group with the aid of the provided manual. These materials are applicable in a variety of educational settings, including traditional university courses and short-term workshops.

INTENDED USERS AND BENEFICIARIES

These materials are designed for pre-service and in-service teachers at the elementary level, although they would also be beneficial for secondary school teachers. They may be administered in a college course curriculum or in a teacher workshop situation. Although the arts are used as examples for teaching aesthetic education in these materials and the materials can be taught by arts specialists and aesthetic education specialists, the information and activities can also be easily used by a non-arts specialist and give the participant varied experiences in several arts forms (literature, drama, visual arts, and music).

GOAL(S) OR PURPOSES(S)

The purposes of this instructional unit is to teach participants 1) to identify elements that are in art forms; 2) to use a shared critical language in discussing the elements and in analyzing the formal, part/whole relationships within works of art; 3) to use the elements as ways of describing and analyzing the aesthetic qualities in the environment and understand the similarities and differences between natural objects and experiences and those created with specific aesthetic intent; and 4) to directly apply the vocabulary methods, techniques and activities to the elementary classroom.

ASSESSMENT PROVISIONS

Learning is assessed by the teacher trainer and the participants. Although the participants are encouraged to use their own perceptions first when analyzing works of art and developing a vocabulary, additional information from experts in the field is provided through reviews, critical analysis, reference readings, and information on photographs used in the visual arts and performing arts section. The participants use these sources to compare and evaluate their own perceptions as well as justifying and comparing their own perceptions in discussions with the teacher trainer, their peer group, and arts specialists whom they contact. Participants will also be able to assess how their ability to analyze a professional arts event has been heightened through the use of vocabulary presented in Arts/Parts when involved in the final activity telling them to attend an arts event.

TIME REQUIREMENTS

Arts/Parts: Perceiving and Analyzing the Arts takes approximately 10 hours with individual sessions being not less than 45 minutes to complete depending upon the class size; the educational setting; the time the teacher group is together; whether it is taught alone or is part of a larger curriculum plan; and how much utilization of outside activities occur.

IMPLEMENTATION PROCEDURES

Arts/Parts: Perceiving and Analyzing the Arts does not require a specialist teacher. Each participant may have their own book or two or three participants might share a book. Individual work and small group discussion is encouraged to enhance interaction. Some of the activities can be done on an individual basis, others have varying degrees of involvement with other members of the teacher education group. Space is required as some activities involve movement and room is needed to spread out some of the materials. The manual outlines all procedures and an individual can go through this entire set of materials without the aid of a teacher trainer by following the manual.

The teacher trainer or the teacher education group is encouraged to relate these activities to professional arts events, to bring in arts specialists to answer any questions and provide further information; and to use the bibliography as a source for further ideas and reinforcement. Participants are also encouraged to use the concepts provided from AEP children's packages for actual curriculum development and try out these ideas with elementary school children.

MATERIALS, EQUIPMENT, AND PERSONNEL REQUIREMENTS

Required Items	Quantity Needed	Cost Per Item	Replacement Rate	Source if Different from Distributor
Arts/Parts book	1 per student	Undetermined	Reusable	
Tape for music and drama activities				
Figures				
Cubes				
Grease pencil				
Puzzle				
Illustration of The Dream				
Word Picture cards				
Manual				
Reference readings				

Personnel Required for Product Adoption and Implementation

A teacher trainer without special training in aesthetic education can implement this unit of instruction. Curriculum consultation is available from CEMREL. Costs for such services can be obtained from this organization.

ASSURANCES AND CLAIMS

The instructional unit, Arts/Parts: Perceiving and Analyzing the Arts, is presently in development. When completed it will be tested as defined in the Basic Program Plan (CEMREL, 1972) and A General Plan for Evaluating The Aesthetic Education Program's Teacher Education Packages (Manis, 1974). At that time appropriate assurances and claims will be made.

AVAILABILITY

This set of materials will undergo field test this Spring and Summer, 1975. The product will be covered by copyright.

INFORMATION CURRENT AS OF MARCH 1975

NIE PRODUCT: THE CREATIVE PROCESS
(Part of the Aesthetic Education Program)

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NARRATIVE DESCRIPTION

The Teacher Education series of the Aesthetic Education Program includes this instructional package which deals with the creative process. This package is currently under development and the content can be outlined as follows:

The materials will emphasize the expressive qualities of an object or experience: how individuals make unique statements by making choices and structuring parts in a certain way for a specific aesthetic intent.

Activities will be provided to enable participants to actively explore creativity through creating their own works, becoming competent in organizing aesthetic elements into a whole work and in articulating their reasons for such choices. Interviews and photographs of well-known artists in various fields will be provided as well as discussions with noted educators and other individuals actively involved in increasing aesthetic awareness. Although the materials will use the arts as examples, ways of encouraging the creative process in every child and the necessity for schools to foster this process will also be emphasized. Throughout this set of materials, practical suggestions and instructions for implementing the creative process in the classroom will be provided. Concepts from related AEP children's packages such as the Aesthetics and the Creative Process series and the Aesthetics and the Artist series will be presented as well as relevant reference readings and a bibliography.

This package will encourage participants to 1) actively explore the creative process by creating their own words of art; 2) expand their critical language necessary for analyzing and judging words of art; 3) use the arts as a teaching tool for aesthetic education; 4) nurture the creative process in every child; and 5) regularly seek out and utilize additional resources in the arts and aesthetic education.

SUBJECT AREA(S)

Teacher Education: Aesthetic Education, Elementary Education, Visual Arts, Music, Drama, Dance, Literature, Film

The Creative Process: How an individual organizes elements for a specific aesthetic intent; the development of a critical language for analyzing one's own work and the work of professional artists; an understanding of different materials, methodologies and structures of arts works; rationale for encouraging affective as well as cognitive learning skills through the nurturing of the creative process in every child.

INTENDED USERS AND BENEFICIARIES

These materials will be designed for pre-service and in-service teachers at the elementary level, although they would also be beneficial for secondary school teachers. They may be administered in a college course curriculum or in a teacher workshop situation. Although the arts are used as examples for teaching aesthetic education in these materials and the materials can be taught by arts specialists and aesthetic education specialists, the information and activities can also be easily used by a non-arts specialist and give the participant varied experiences in several arts forms (literature, drama, dance, visual arts, and music).

GOAL(S) OR PURPOSE(S)

The purpose of this instructional package will be to teach participants to: 1) organize their own method or structure for completing a whole work of their own design; 2) describe and analyze the aesthetic decisions used in completing the whole work; 3) transform the elements into whole works in a number of arts disciplines, therefore being able to discuss and contrast the elements, methods, or structures of a variety of arts forms; 4) analyze and criticize works of art; 5) perceive, analyze and discuss how professional artists organize elements into a whole work; and 6) understand the need for aesthetic education and the encouragement of creativity in the elementary schools.

PATTERNS OF USE

It is anticipated that The Creative Process will be a self-contained unit of instruction with activities that are sequential and cumulative. It will be developed for use as part of an ongoing college curriculum or in teacher workshops. It may be part of an integrated arts course, an aesthetic education course or an arts in general education course and can be linked with AEP children's packages in the Aesthetics and the Creative Process and the Aesthetics and the Artist series.

ASSESSMENT PROVISIONS

Learning will be assessed by the teacher trainer and the participants. Specific procedures will be delineated during development.

TIME REQUIREMENTS

It is estimated that these materials will take approximately 10 hours to complete, depending on the class size; the educational setting; the time the teacher group is together; whether it is taught alone or is part of a larger curriculum plan; and how much utilization of outside activities occur.

IMPLEMENTATION PROCEDURES

The Creative Process will not require a specialist teacher. Participants will probably work individually and in small groups to enhance interaction. A working space will probably be necessary. Specific procedures appropriate to the learning experiences will be delineated during development cycle.

MATERIALS, EQUIPMENT, AND PERSONNEL REQUIREMENTS

Unknown at this time.

Personnel Required for Product Adoption and Implementation

A teacher trainer without special training in aesthetic education will be able to implement this unit of instruction. Curriculum consultation will be available from CEMREL. Costs for such services can be obtained from this organization.

ASSESSMENT AND CLAIMS

The instructional unit, The Creative Process, is presently in development. When completed it will be tested as defined in the Basic Program Plan (CEMREL, 1972) and A General Plan for Evaluating The Aesthetic Education Program's Teacher Education Packages (Manis, 1974). At that time appropriate assurances and claims will be made.

AVAILABILITY

This product is scheduled to begin testing in the Summer 1975 and it will be copyrighted.

INFORMATION CURRENT AS OF MARCH 1975